

Via Electronic Mail

March 24, 2011

Mr. John V. Fagiolo
U.S. Environmental Protection Agency
Superfund Division (SR-6J)
77 W. Jackson Blvd.
Chicago, Illinois 60604-3507

Re: PZ-111A Investigation Report
Bofors-Nobel Site

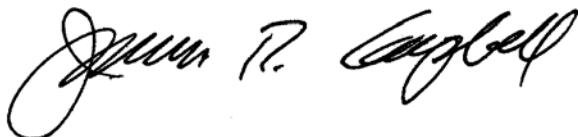
Dear Mr. Fagiolo:

On behalf of the Performing Settling Defendants, the parties that are undertaking the remedial work at the Bofors-Nobel Site ("the Site"), enclosed for your review is the PZ-111A Investigation Report. Groundwater sampling and VAS work completed in Fall 2010 show that the toluene impact at PZ-111A did not migrate from the lagoon area and is vertically limited to the screened interval of PZ-111A. The data also suggest that the area of impact is limited to the vicinity of PZ-111A. In an effort to define the size of the impacted area, we are proposing to pump monitoring well PZ-111A at the maximum sustainable rate, anticipated to be in the range of 1 gallon per minute (gpm), for a week while measuring the effect pumping has on the toluene concentration. The pumping rate will be adjusted based upon field conditions. The extracted groundwater will be conveyed by pipeline to the PW-30 pump house where it will be discharged to the existing groundwater transmission line for treatment at the groundwater treatment plant. We are proposing to conduct the pumping while our sampling crew is on-Site for the April groundwater monitoring event and have scheduled the sampling event to begin on April 18, 2011. We welcome your input on the proposed pumping plan and are available for a conference call to discuss it at your earliest convenience.

If you have any questions or need additional information, please do not hesitate to contact me.

Very truly yours,

ENGINEERING MANAGEMENT, INC.



James R. Campbell, Ph.D., P.E.

cc: T. Krueger (USEPA)
W. Wagaw (MDEQ)
Bofors-Nobel Management Committee
J. Maynard
NewFields, Inc.

PZ-111A Investigation Data Report

For the Bofors-Nobel Superfund Site

March 23, 2011

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1.0 Introduction

An investigation was initiated in September 2010 on the Bofors-Nobel Superfund Site (the Site) in accordance with the September 2010 PZ-111A Investigation Work Plan (the Work Plan). This investigation was deemed necessary due to an anomalous 200,000 parts per billion (ppb) detection of toluene in monitoring well PZ-111A on June 15, 2009. This well is immediately west of the barrier wall (location shown in Figure 1). The 200,000 ppb detection was an order of magnitude greater than the highest concentration of toluene ever detected in the 30-yr history of monitoring for toluene in Site groundwater, and was over 30 times greater than the highest concentration ever measured on that side of the site. This report provides the results of the investigation, which included vertical aquifer sampling (VAS) adjacent to PZ-111A. The objectives of this investigation were to determine:

- 1) whether the toluene spike first detected in PZ-111A in June 2009 is associated with releases from inside or outside of the barrier wall, or from upgradient at the Lomac site; and
- 2) whether the toluene or other contaminants of concern (COCs) could be a threat to property boundary or surface water points of compliance as defined in the Consent Decree.

Existing wells upgradient, downgradient, and side-gradient of PZ-111A were sampled, and a new VAS boring was performed approximately 20 feet downgradient of PZ-111A. The data collected in accordance with the Work Plan are reported herein, along with conclusions regarding the toluene distribution.

Of special concern was the determination of whether or not the toluene or other contaminants are migrating through or around the barrier wall from the former lagoon area or migrating from the Lomac manufacturing area at concentrations that could create human health or environmental risk at the property boundary or on-site surface waters.

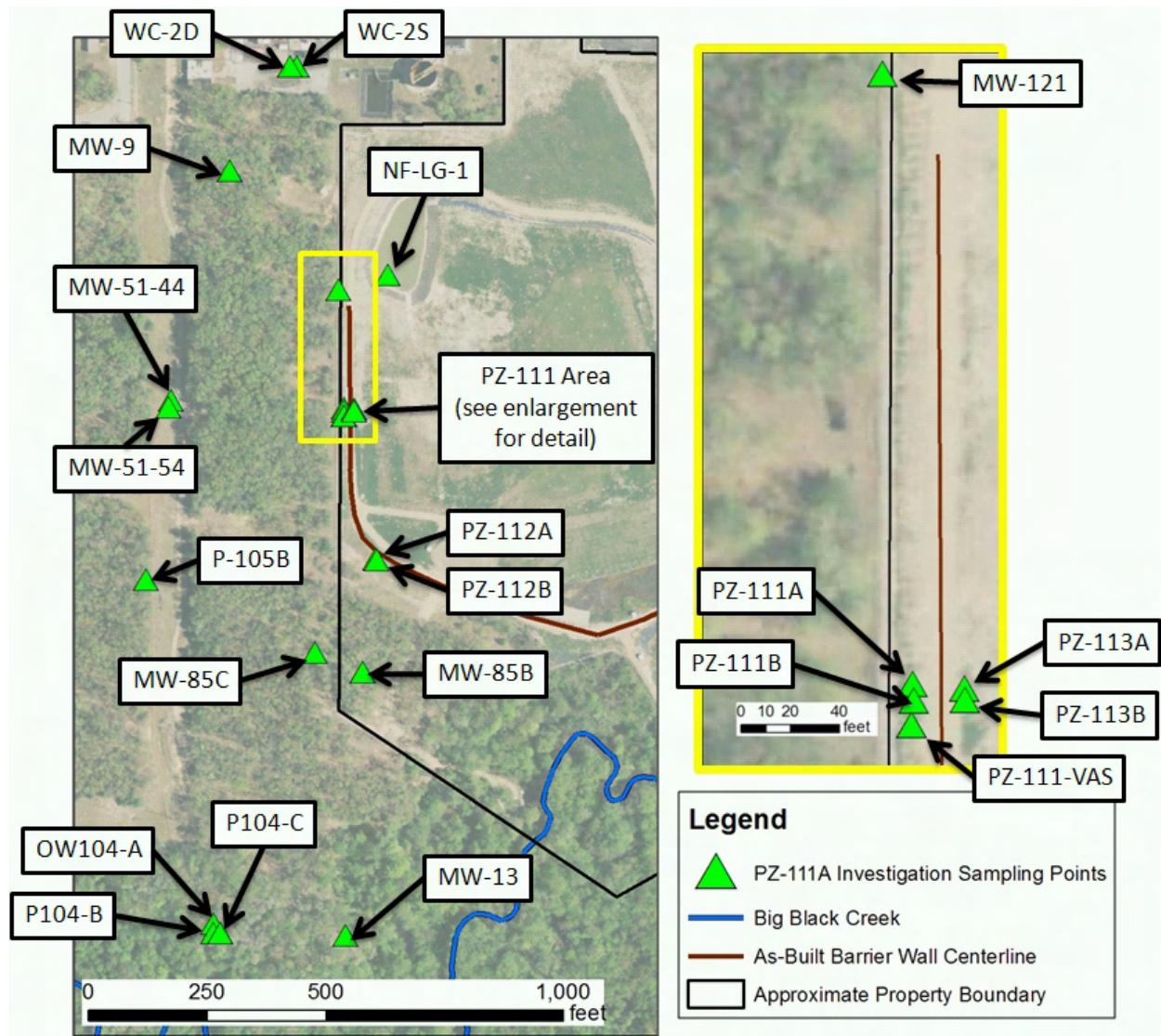
2.0 Field Data Collection Effort

One surface water location and twenty wells were sampled for volatile organic compounds (VOCs) and semivolatile organic compounds (SVOCs), including low level benzidine and 3,3'-dichlorobenzidine (DCB). Wells PZ-111A, PZ-111B, PZ-113A, PZ-113B and MW-121 were also sampled for major ions to assist, if needed, in the assessment of whether or not contaminants were being transported across or around the barrier wall in this location. As part of the interim groundwater monitoring plan, wells PZ-111A and PZ-111B were also analyzed for metals and other inorganic compounds. The list of monitoring locations and the analyses conducted is provided in Table 1. Sampling requested by the EPA to determine the presence or absence of Lomac-specific chemicals was conducted twice in 2010 in wells PZ-111A and PZ-111B, and this data is included in Attachment 1 of this report. The chemical sampling locations for the PZ-111 Investigation Work Plan are shown in Figure 1. Well OW-105A, included in the PZ-111 Investigation Work Plan, was not sampled because no water was present in the well at the time of sampling. Well P-105, the next well down in the cluster, was sampled instead. Well MW-51-40 was not sampled because it did not recharge; wells MW-51-44 and MW-51-54 were used to represent this location. Three other planned sample locations, MW-4, MW-80A, and MW-80B, had been decommissioned in 2006 and were not available for sampling.

TABLE 1. FALL 2010 WELLS SAMPLED AND ANALYSES PERFORMED.

Monitoring Location	GW, SW, VAS or Soil	SW Level	GW Level	Standard VOCs, SVOCs and Low Level Benzidine/DCB	Standard Metals, TDS, TSS, COD, Ammonia- Nitrogen and Sulfite	Bromide, Nitrate, Nitrite, Chloride, o-Phosphate, Manganese, Potassium, Sodium, Ferrous Iron, Methane and Sulfide	
PZ-111A	GW		x	x	x	x	
PZ-111B	GW		x	x	x	x	
MW-121	GW		x	x		x	
PZ-113A	GW		x	x		x	
PZ-113B	GW		x	x		x	
NF-LG-1	SW	x		x			
PZ-112A	GW		x	x			
PZ-112B	GW		x	x			
MW-13	GW		x	x			
MW-51-40	GW			DID NOT RECHARGE IN 2010			
MW-51-44	GW		x	x			
MW-51-54	GW		x	x			
WC-2D	GW		x	x			
WC-2S	GW		x	x			
MW-85B	GW		x	x			
MW-85C	GW		x	x			
MW-9	GW		x	x			
OW-104A	GW		x	x			
OW-105A	GW			NO WATER IN 2010			
P-104B	GW		x	x			

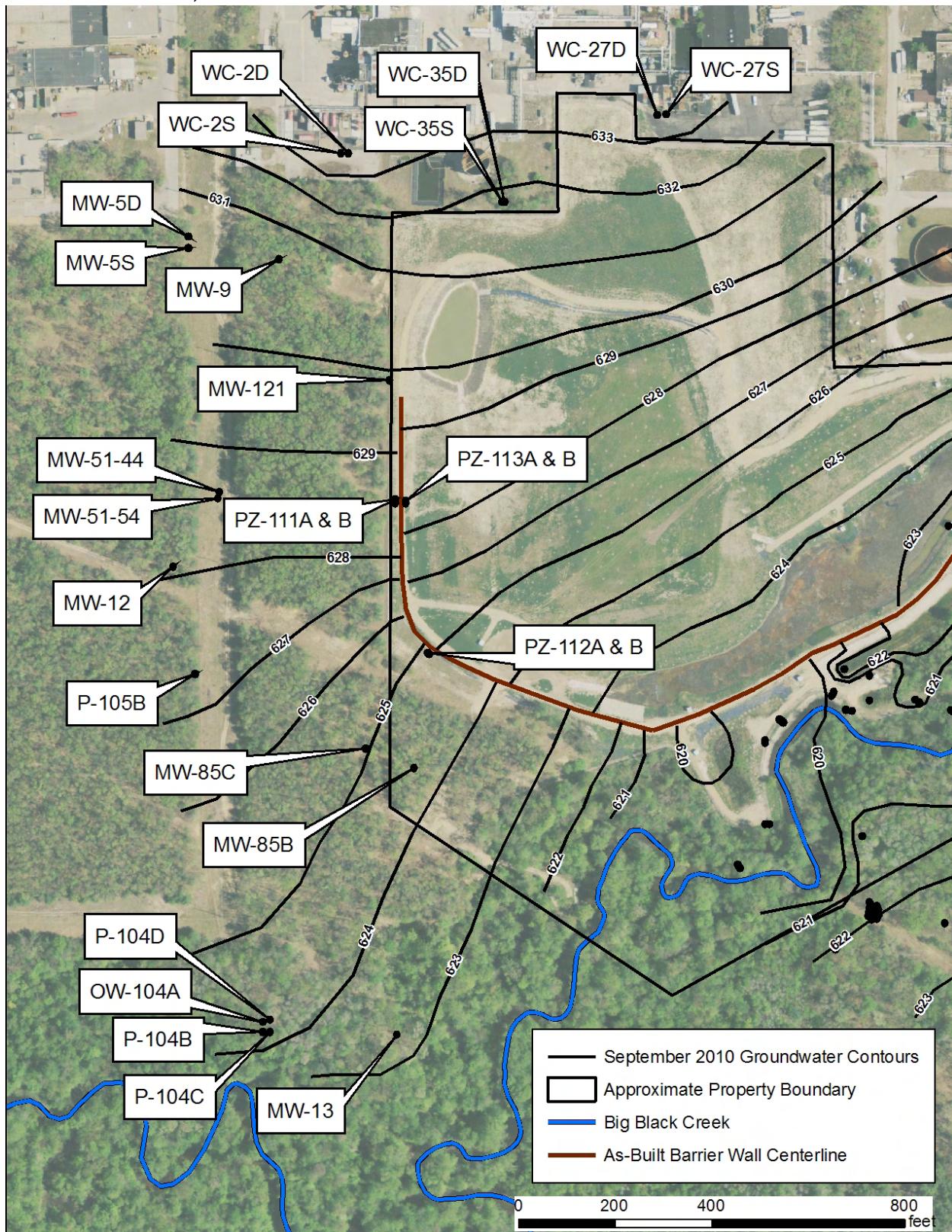
P-104C	GW		x	x		
P-105B	GW		x	x		
MW-12	GW		x			
MW-3	GW		x			
MW-41	GW			DECOMMISSIONED IN 2006		
MW-42	GW			WAS NOT FOUND IN 2010		
MW-5D	GW		x			
MW-5S	GW		x			
MW-80A	GW			DECOMMISSIONED IN 2006		
MW-80B	GW			DECOMMISSIONED IN 2006		
WC-26D	GW			DESTROYED - OBSERVED IN 2008		
WC-26S	GW			DESTROYED - OBSERVED IN 2008		
WC-27D	GW		x			
WC-27S	GW		x			
WC-35D	GW		x			
WC-35S	GW		x			
PZ-111-VAS	VAS		x	x		

FIGURE 1. LOCATION MAP FOR PZ-111A INVESTIGATION ANALYTICAL MONITORING.

All of the locations represent groundwater, with the exception NF-LG-1 which is in a surface water pond just north of the western terminus of the barrier wall. This specific location was requested by the EPA in a 9/14/2010 comment letter.

A synoptic water level measurement event took place on September 22, 2010. Water level was measured for the purpose of the PZ-111A investigation in all of the locations shown in Figure 1 plus the additional locations in Figure 2. Groundwater contours in Figure 2 were drawn using those water level measurements. The table of all September 22, 2010, water level measurement data is provided in Attachment 3.

FIGURE 2. SEPTEMBER 22, 2010 GROUNDWATER CONTOURS.



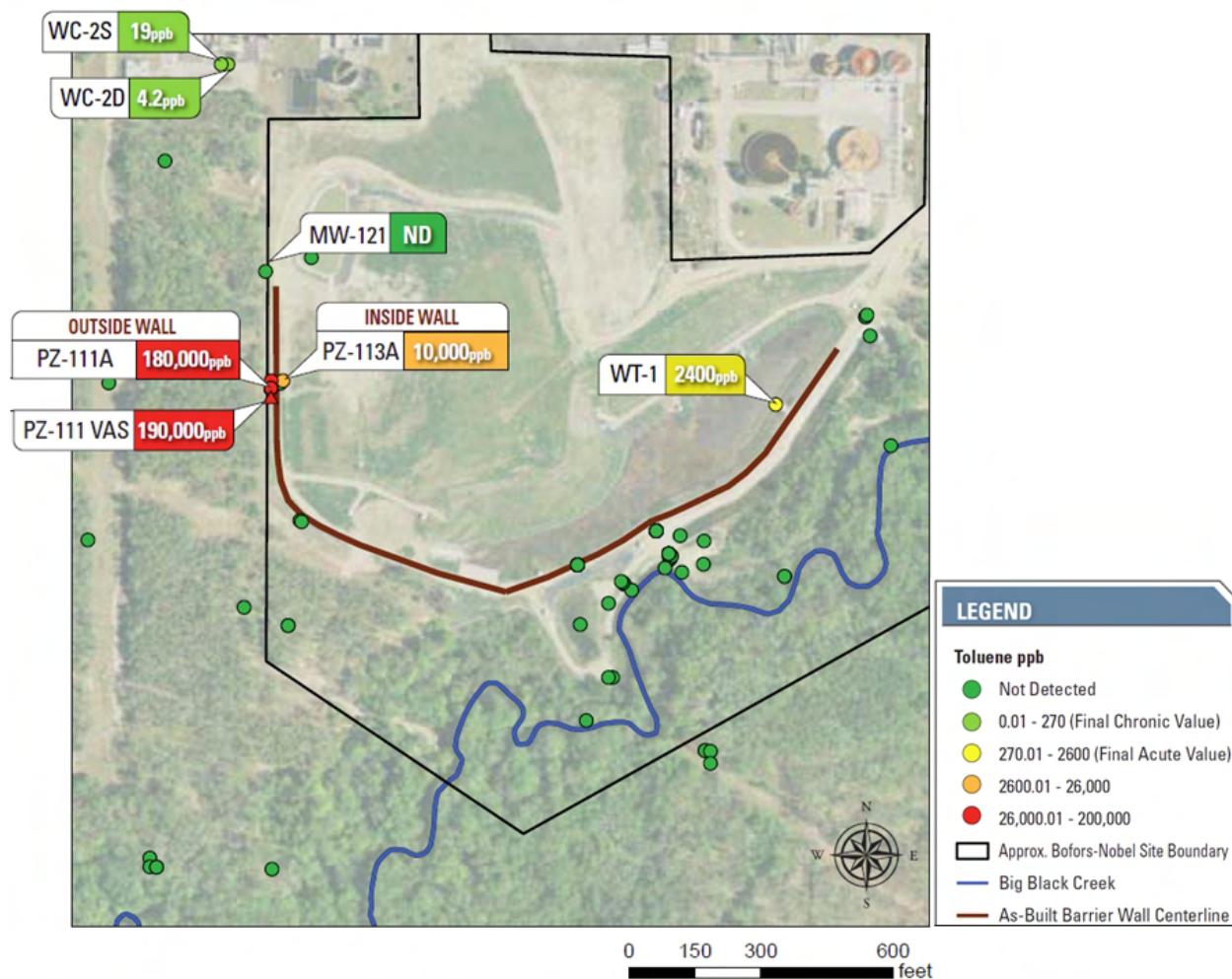
3.0 Results

The fall of 2010 data collected for the PZ-111 assessment are provided in Attachment 1 and in an Excel spreadsheet on a disc provided with this report. Toluene, chlorobenzene, cis-1,2-dichloroethylene and p-cresol exceeded performance standards in well PZ-111A and in the PZ-111 VAS boring. Chlorobenzene and toluene exceeded performance standards in well PZ-113A. At well WC-2S there was an exceedance of 1,2-dichlorobenzene. No EPA-specified Lomac-related chemicals (Table 2) were detected anywhere on the Site, including PZ-111A and PZ-111B, in the January and March 2010 site wide sampling of 33 locations.

2-chloro,4-aminotoluene (2-cat)
2-amino 5-chloro-toluenesulfonic acid (c-amine)
Dipropylamine
Dimethylformamide
Phosphorus Oxytrichloride
P-Toluidine
Tetranitromethane

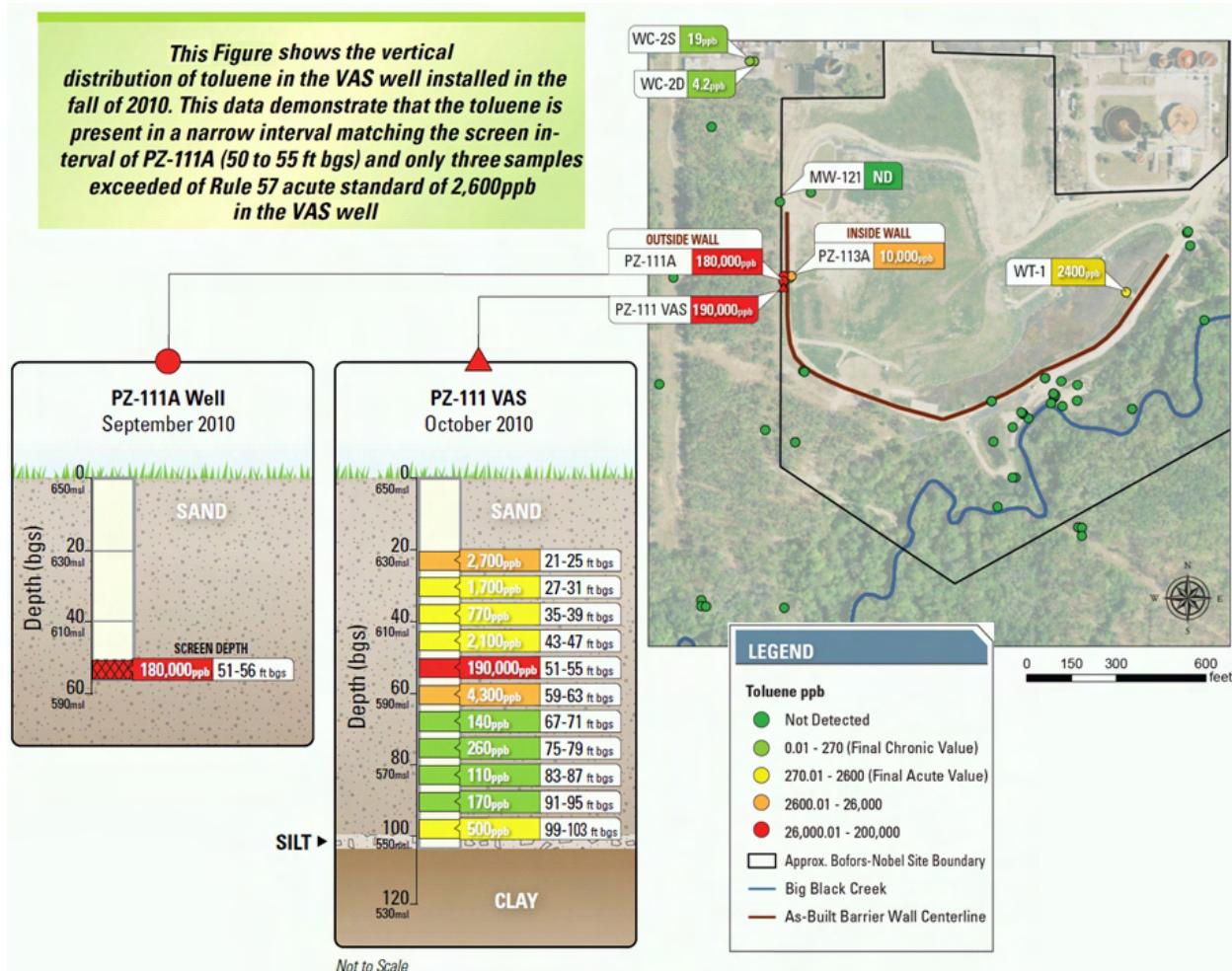
TABLE 2. EPA-IDENTIFIED CONTAMINANTS SPECIFIC TO OPERABLE UNIT 2 (LOMAC FACILITY).

The elevated levels of toluene first detected in well PZ-111A in June 2009, were accompanied by elevated levels of chlorobenzene, and the appearance of p-cresol and cis-1,2-dichloroethylene. The spatial distribution of toluene results—from the PZ-111 investigation, Meander Bend investigation and regular sampling locations—are presented in Figure 3.

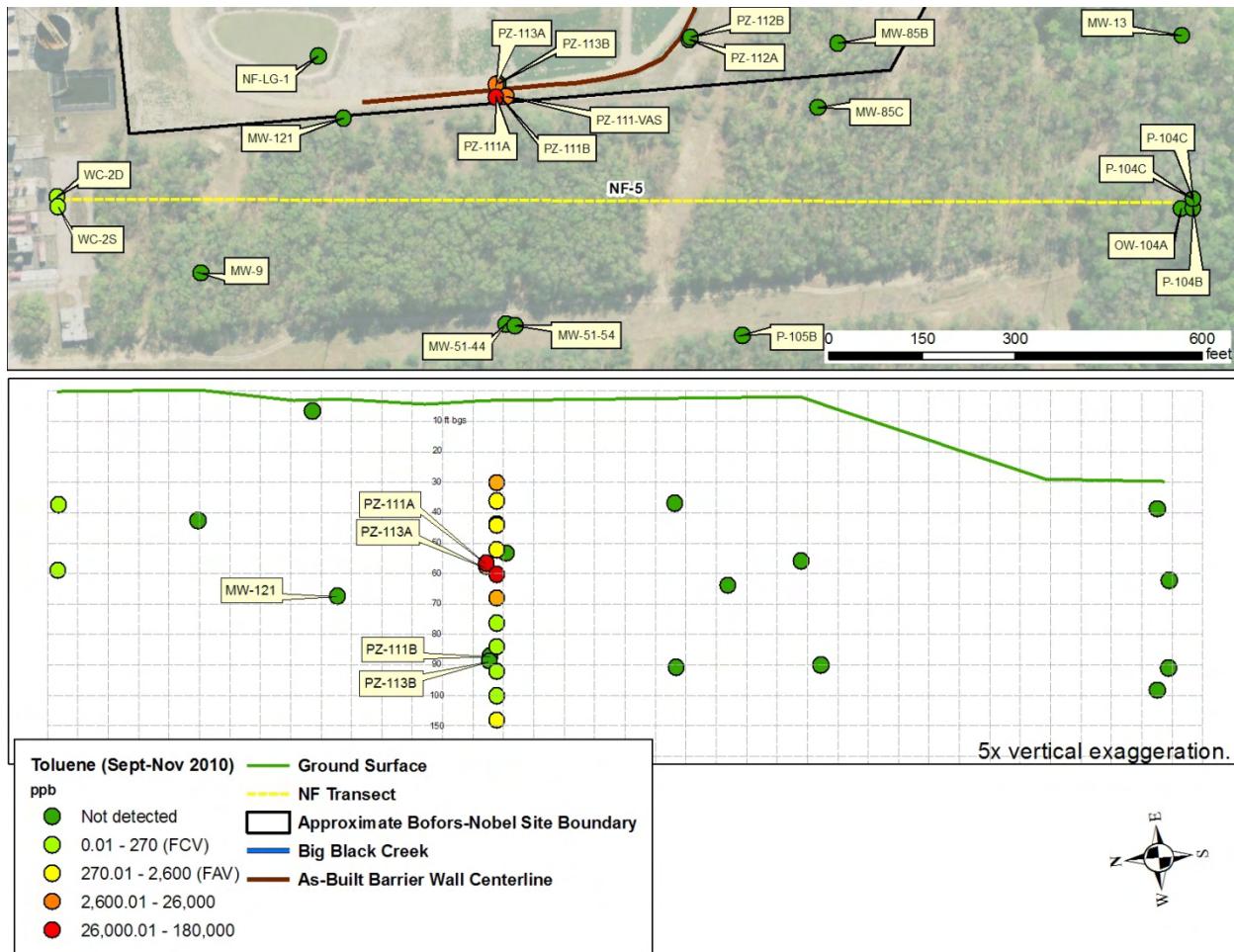
FIGURE 3. FALL 2010 SAMPLING RESULTS FOR TOLUENE

Additional detail on the vertical relationship between the PZ-111 VAS sampling and the detections in PZ-111A are shown in Figure 4.

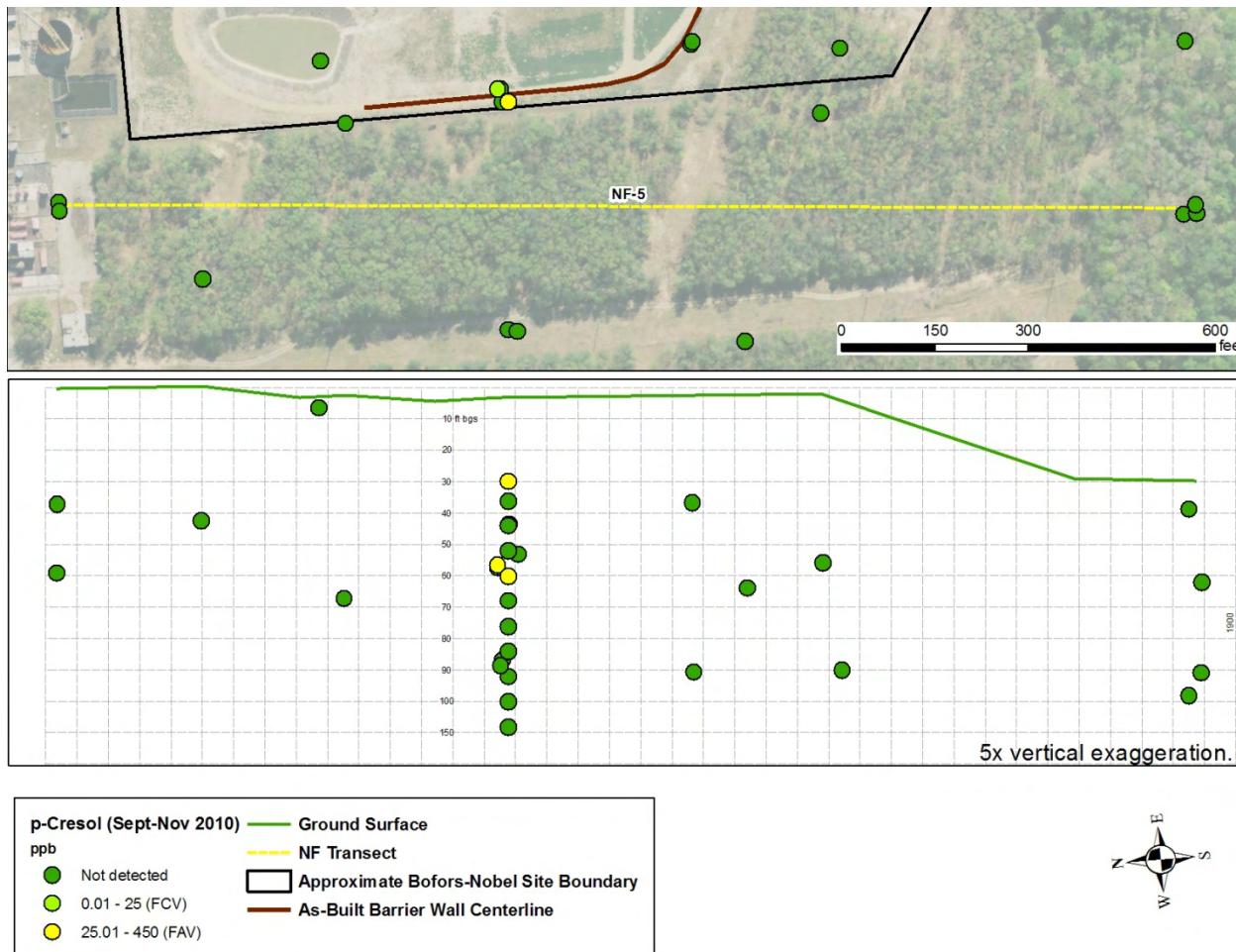
FIGURE 4. RELATIONSHIP BETWEEN PZ-111A AND VAS SAMPLING



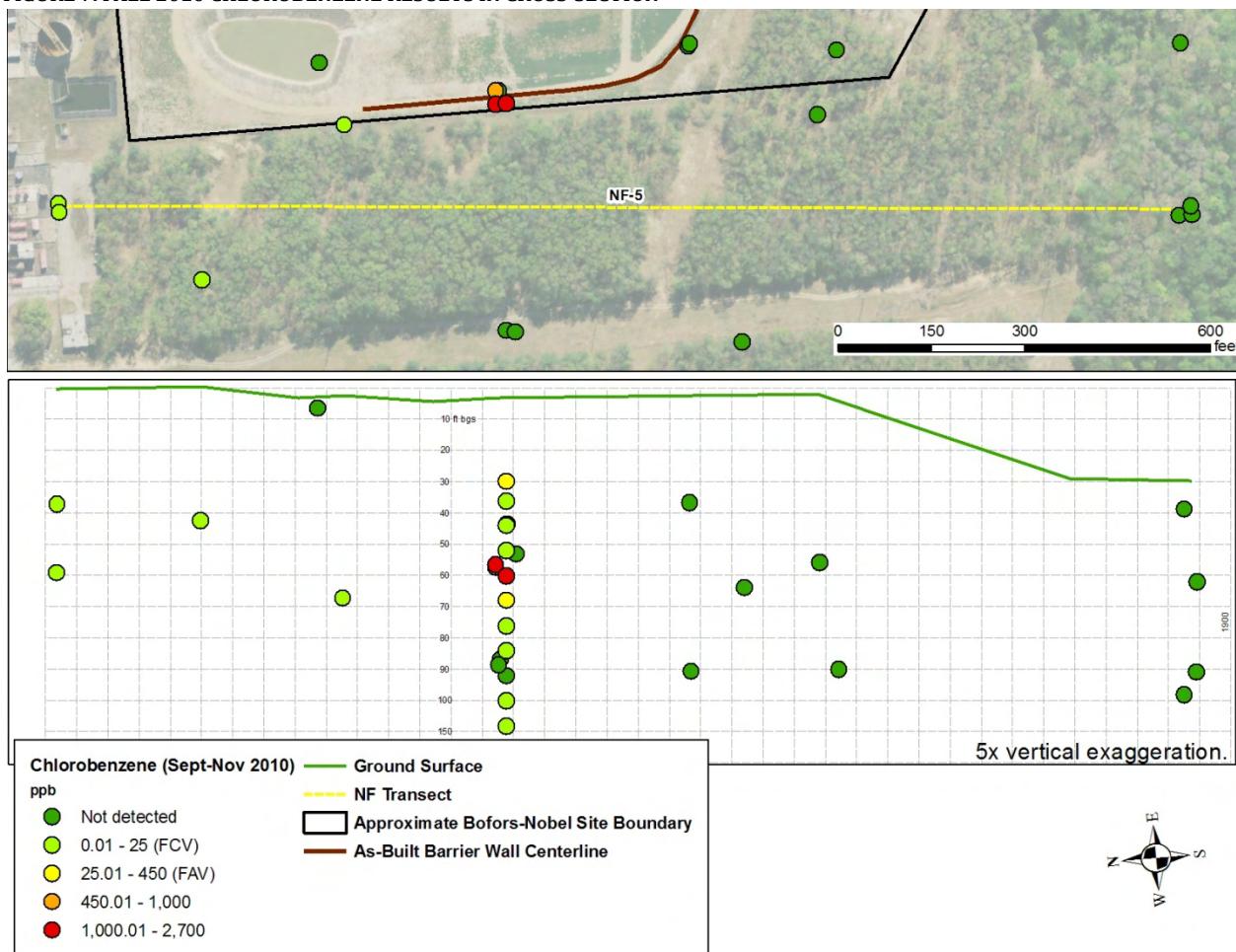
The vertical distributions of toluene, chlorobenzene, p-cresol, cis-1,2-dichloroethylene and 1,2-dichlorobenzene data along the western wall are shown in Figures 5 through 9.

FIGURE 5. FALL 2010 TOLUENE RESULTS IN CROSS-SECTION.

The sample locations in the vertical profile are displayed in the locations of the middle of the well screens. Based on the VAS results, the maximum concentration of toluene is at the same depth interval as the screen for well PZ-111A. The distribution of toluene specifically, spatially and vertically, is discussed in Section 4.0.

FIGURE 6. FALL 2010 P-CRESOL RESULTS IN CROSS-SECTION.

During this sampling event, p-cresol appeared only in PZ-111A, the corresponding depth of the VAS, at the water table in the VAS, and in PZ-113A (Figure 6). The concentration gradient of p-cresol in this location is from outside to inside of the wall in PZ-113A. P-cresol was not detected upgradient or downgradient from PZ-111A. Historically, p-cresol has been detected inside of the barrier wall associated with high levels of toluene, possibly due to the presence of anaerobic bacteria in site soils which produce p-cresol as an intermediary byproduct of toluene degradation. This contaminant is not expected to reach points of compliance at levels above performance standards.

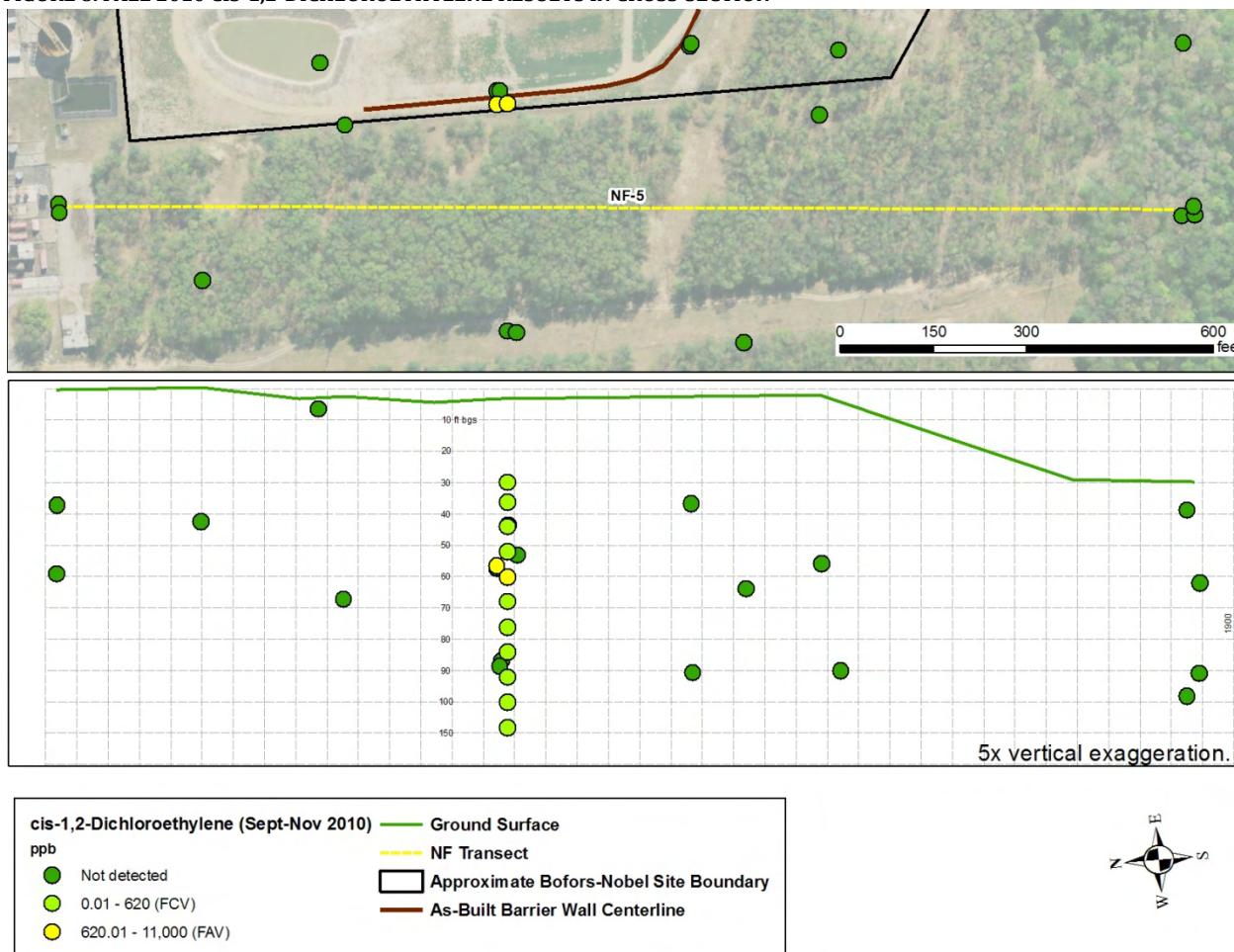
FIGURE 7. FALL 2010 CHLOROBENZENE RESULTS IN CROSS-SECTION

Since sampling first began at the well in December 2006 until June 2009, chlorobenzene had been detected in well PZ-111A at levels above the Rule 57 final chronic value (FCV) but below the final acute value (FAV). Historically, chlorobenzene was once detected upgradient of well PZ-113A above the FAV (April 2003 in well WC-2S) and has almost always been present when tested for in upgradient wells, although normally in low levels below the FCV. Chlorobenzene has never been detected in wells further downgradient above 0.3 ppb. It is not expected that the levels of chlorobenzene detected in well PZ-111A during this sampling event (Figure 7) will reach points of compliance at levels above performance standards.

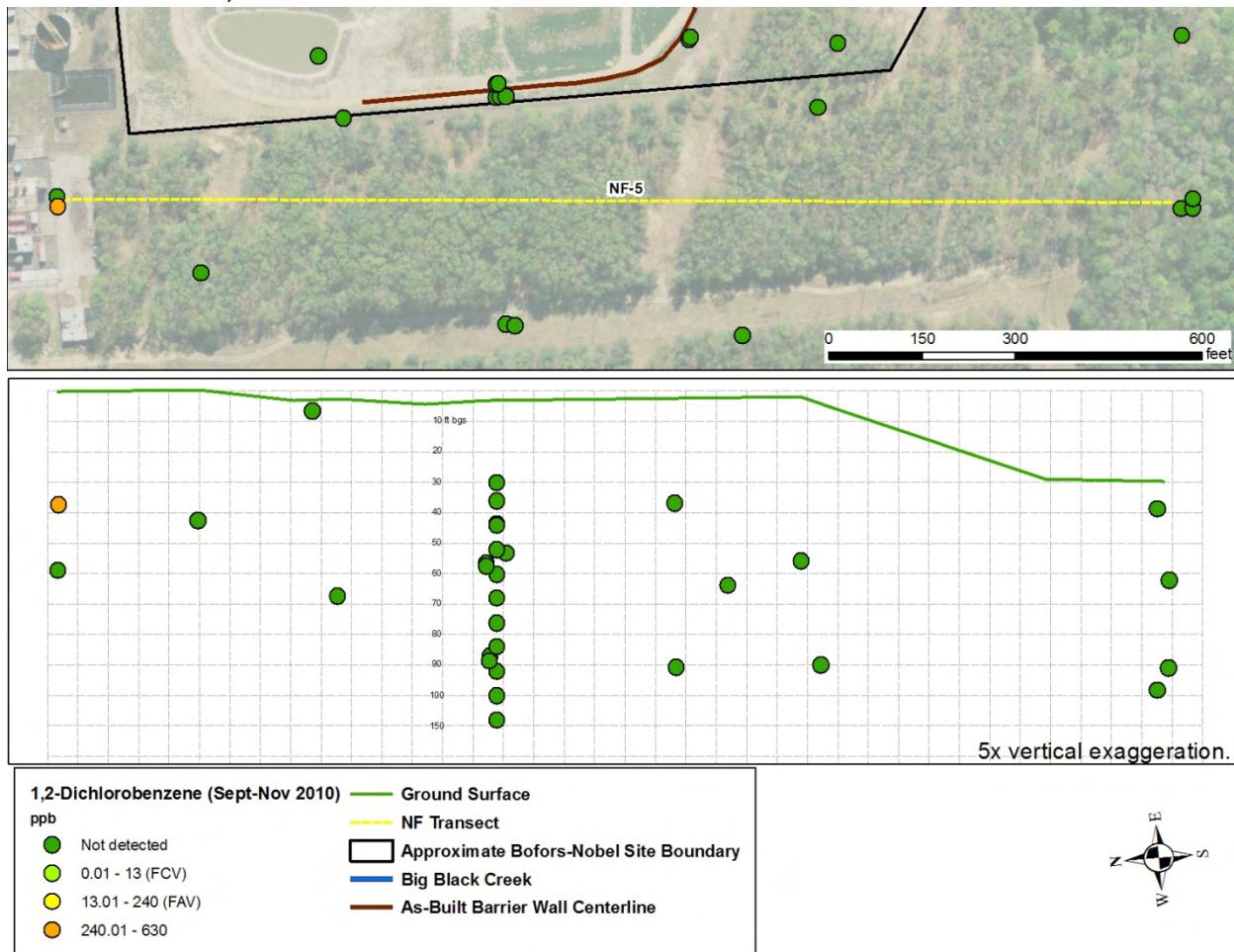
During this sampling event, chlorobenzene was detected inside the barrier wall in well PZ-113A, at a concentration of 900 ppb, which historically is a concentration of chlorobenzene to be expected in groundwater of the former lagoon area. However, chlorobenzene was detected in well PZ-111A at 2,700 ppb during this sampling event, and was detected at over 5,500 ppb in the June 2009 sample from this well; higher than the highest historical detection of chlorobenzene in the former lagoon area. The appearance of unprecedented

levels of chlorobenzene in PZ-111A coincides with the appearance of unprecedented levels of toluene. Also like toluene, the concentration gradient of chlorobenzene is from outside to inside of the barrier wall.

FIGURE 8. FALL 2010 CIS-1,2-DICHLOROETHYLENE RESULTS IN CROSS-SECTION



During this sampling event, cis-1,2-dichloroethylene occurs above the Rule 57 final chronic value (FCV) only in well PZ-111A and in the corresponding depth interval of the PZ-111 VAS boring (Figure 8). This contaminant was not detected inside the barrier wall adjacent to PZ-111A. The concentrations of this contaminant do not present a risk to human health or the environment, and it is not detected downgradient.

FIGURE 9. FALL 2010 1,2-DICHLOROBENZENE RESULTS IN CROSS-SECTION.

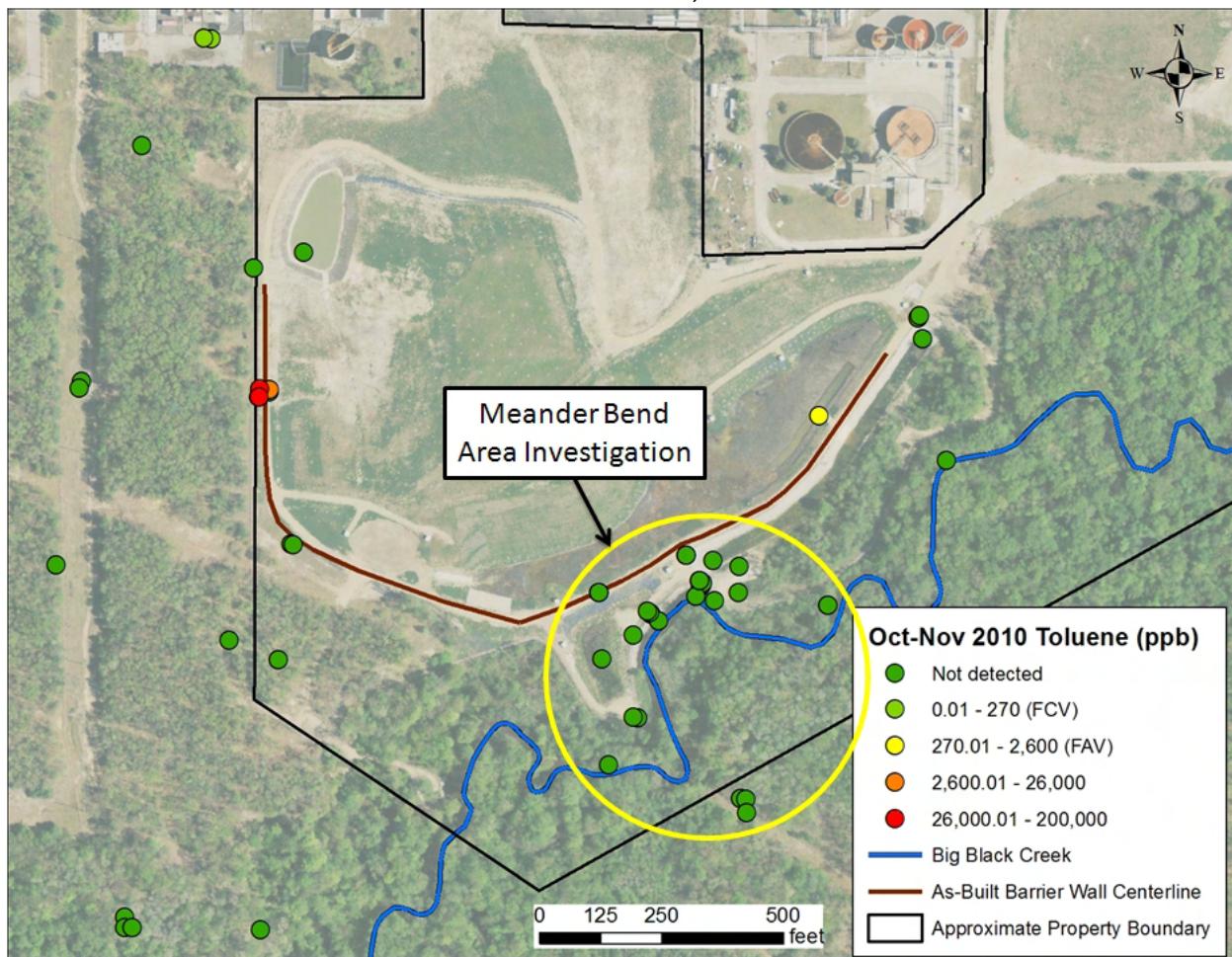
As shown in Figure 9, 1,2-dichlorobenzene was only detected in well WC-2S on the Lomac property. It does not appear that the 1,2-dichlorobenzene is moving downgradient at any detectable concentration.

4.0 Discussion of Toluene

SPATIAL DISTRIBUTION OF TOLUENE

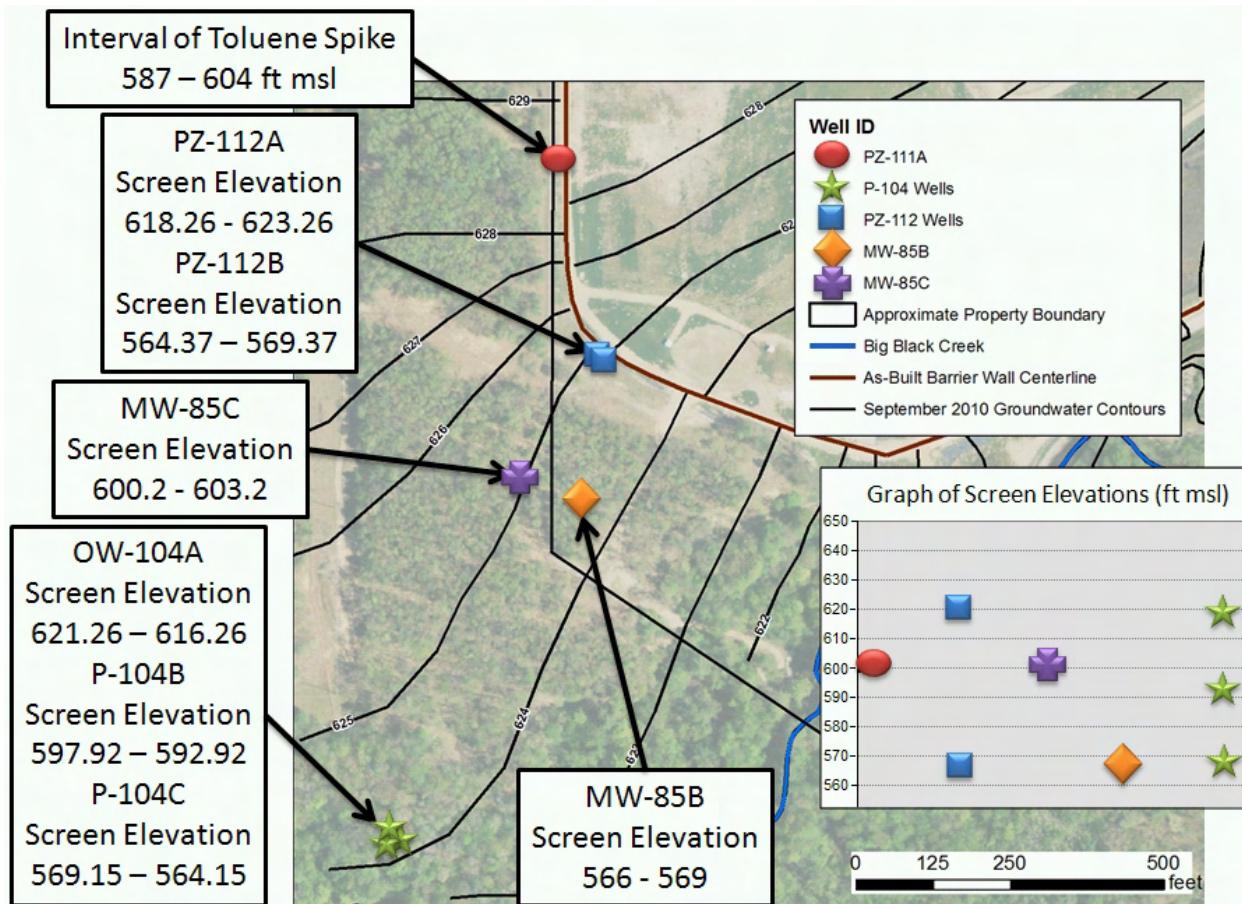
Upgradient of PZ-111A, there were only two toluene detections located north of the western terminus of the barrier wall (called out in Figures 2 and 3). These two detections of 19 ppb and 4.2 ppb are orders of magnitude below the ROD performance standards and both are located over 2,000 feet from the nearest downgradient surface water body.

Toluene was not detected in any of the measurements downgradient from PZ-111A. This includes the sampling that was conducted as part of a separate investigation in the Meander Bend area, shown on Figure 10.

FIGURE 10. RESULTS OF ALL TOLUENE MEASUREMENT IN FALL OF 2010, INCLUDING MEANDER BEND AREA

VERTICAL DISTRIBUTION

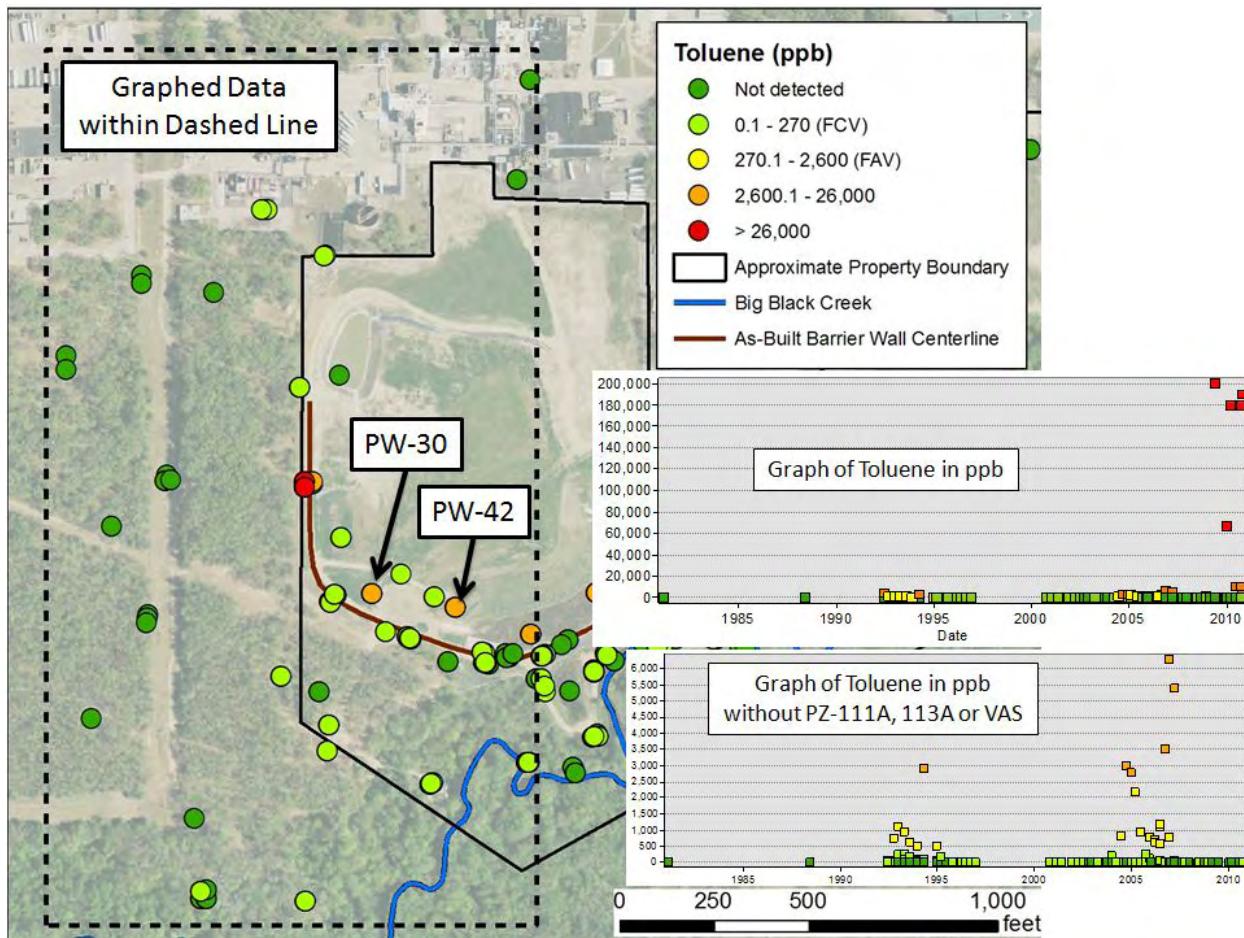
Toluene above performance standards was detected in the area of PZ-111A from elevations 587 to 604 feet above mean sea level (ft msl), as determined by VAS and by the well-screen interval of PZ-111A. The closest downgradient wells which are most likely to be in the pathway of groundwater flow from the vicinity of PZ-111A are shown in Figure 11. The screen of monitoring well MW-85C, at an elevation of 600.2 to 603.2 ft msl, is within the interval of the contamination found in the vicinity of PZ-111A (598 to 604 msl). This well is approximately 500 feet downgradient of PZ-111A. An additional well cluster, P-104, is adjacent to Big Black Creek at the downgradient surface water location closest to PZ-111A. One of the wells in this cluster (P-104B) is screened from 592.9 to 597.9 ft msl, within the elevation interval of contamination at PZ-111A. The other well screens in the P-104 cluster are approximately 10 feet and 30 feet higher and lower, respectively. No toluene has been detected in any of these downgradient wells.

FIGURE 11. VERTICAL SPACING OF WELL SCREENS DOWNGRADIENT OF PZ-111A

TEMPORAL DISTRIBUTION OF TOLUENE

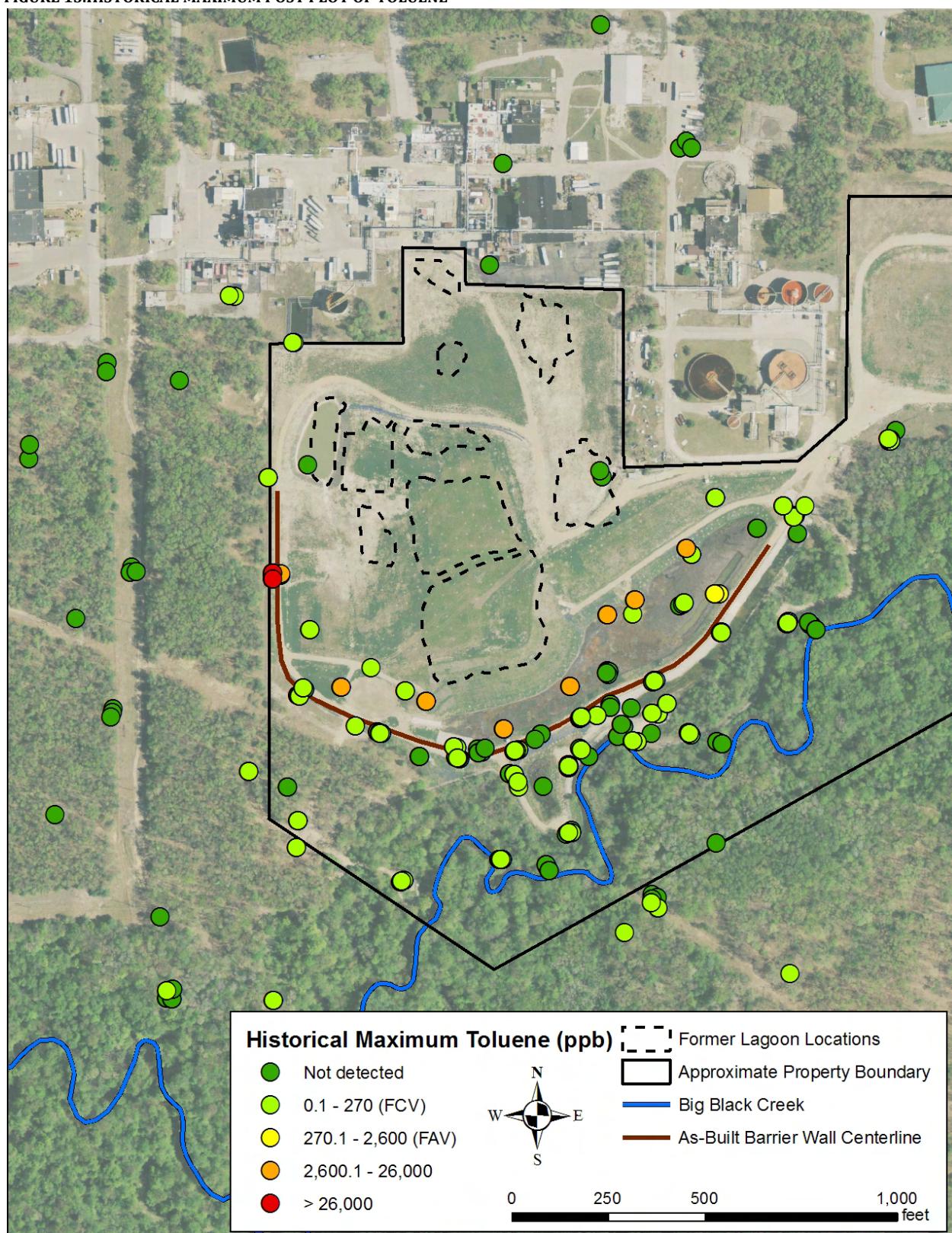
With the exception of a 600 ppb detection in December 2008, toluene was consistently either not detected or estimated as a value below the reportable detection limit (RDL) from January 2006 (when PZ-111A was installed) through March 2009. In June 2009, toluene was detected at 200,000 ppb. The concentration of toluene measured in samples from PZ-111A have fluctuated widely, but remained in the 10,000 -20,000 ppb range in the four measurement events since June 2009. The dramatic change in contaminant concentrations in PZ-111A occurred between March and June of 2009.

The temporal pattern of toluene on the western side of the site is shown on Figures 11 and 12. Figure 11 shows the results of all analyses for toluene on the western side of the site since sampling was initiated in 1980. The very high measurements that occurred in PZ-111A obscure the temporal pattern of contamination on the west side of the site beyond PZ-111A. This is shown in the graph on Figure 12 with the PZ-111A, PZ-113A, and PZ-111-VAS data removed.

FIGURE 12. TEMPORAL PATTERN OF TOLUENE ON WEST SIDE OF SITE WITH AND WITHOUT PZ-111A TOLUENE SPIKE.

Toluene concentrations on the west side of the site have previously exceeded performance standards in two pumping wells, PW-42 and PW-30. In PW-42 toluene spikes of short duration reached 6,200 ppb and dropped to below the detection limit by 2008. Prior to the June 2009 high toluene concentrations, toluene was not detected west of the former lagoons at concentrations above the FCV (see Figure 13).

FIGURE 13. HISTORICAL MAXIMUM POST PLOT OF TOLUENE



5.0 Potential Fate and Transport

The significance of the 200,000 ppb toluene concentration at PZ-111A, with respect to potential impact on downgradient surface water bodies, was examined utilizing a one-dimensional solute transport model for organic chemicals (TRANS1D). As a conservative assessment, the likely maximum concentration that could be produced at the nearest downgradient well from a continuous source of 200,000 ppb at PZ-111A was examined. A distance of 350 feet was utilized assuming a flow path along the wall from PZ-111A to the nearest downgradient well cluster (PZ-112). The values utilized for the model input are:

Hydraulic conductivity (m/d) = 1.3 ¹

Effective porosity = 0.2 (20%) ²

Hydraulic gradient = 0.0075 ³

Longitudinal dispersivity (m) = 10 ⁴

Fraction organic carbon = 0.002 ⁴

Dry bulk density (g/cm³) = 1.8 ³

Degradation half life (d) = 210 ⁵

Source concentration (mg/l) = 200

Based on the model input values, it would take approximately 10 years for dissolved toluene to travel downgradient 350 feet and the concentration at the downgradient well would be 124 ppb, less than half of the performance standard.

The input parameters that are variable in this instance are longitudinal dispersivity and effective porosity. Porosity can be assumed based on soil type and varying the porosity does not significantly affect the outcome of the one dimensional flow prediction. A value of 100 for the longitudinal dispersivity is the realistic outer limit of input assumption that would materially increase the concentration of toluene in downgradient locations. Using a longitudinal dispersivity value of 100, the concentration of toluene 350 feet downgradient would reach a maximum of 1,312 ppb after approximately 3.2 years.

Although the downgradient screen at well PZ-112A is approximately 15 feet above the PZ-111A screen (and PZ-112B about 30 feet below), toluene moving downgradient would still

¹ February 1990 Remedial Investigation Report, page 3-49.

² Default value for sand.

³ February 1990 Remedial Investigation Report, page 3-60.

⁴ Default value.

⁵ Most conservative value for toluene in an anaerobic environment.

be detectable at PZ-112, due to vertical movement from dispersion or diffusion from concentration gradients. The vertical distribution of toluene from the highest concentration layer 25 feet below the water table to the water table is evident in the PZ-111 VAS boring. Toluene varied from 190,000 ppb 25 feet below the water table to 2,700 ppb at the water table.

With a longitudinal dispersivity of 100, the concentrations at PZ-111A should have produced detectable concentrations in the PZ-112 well cluster 350 feet downgradient by the time of the fall 2010 sampling event. The absence of such detections indicates that the source likely is of very limited quantity and distribution.

If there is a constant source at PZ-111A with a longitudinal dispersivity of 10, the maximum concentration of toluene to reach 350 feet downgradient along the outside of the wall would likely not occur until 2019 and would be well below the FCV. In the worst case scenario, the maximum concentration of toluene is predicted to reach 350 feet downgradient in 2012 at concentrations below the FAV. In the latter scenario, some concentration of toluene in the leading edge of the plume should have been detected in the nearest downgradient wells during the fall 2010 sampling, but was not.

6.0 Conclusions and Recommendations

The following conclusions are drawn from the data.

- The toluene spike in PZ-111A is likely from a localized source and did not migrate from the lagoons or former plant area.
- Elevated levels of toluene in PZ-111A are not migrating off-site above the drinking water standard of 790 ppb, and are not expected to do so in the future.
- Elevated levels of toluene in PZ-111A are not reaching surface water bodies at measurable concentrations above the Rule 57 FCV of 270 ppb, and are not expected to do so in the future.

There is likely a relatively small volume of toluene and co-located contaminants in the vicinity of PZ-111A. This will be tested by pumping PZ-111A and determining the volume of removed contaminants and rebound following termination of the pump test. PZ-111A will be pumped at the maximum sustainable rate, anticipated to be in the range of 1 gallon per minute (gpm), for 5 to 7 days. The pumping rate will be adjusted based upon field conditions. The change in concentration of standard VOCs will be monitored before and during the pump test. Two weeks after the pump test, a sample will be collected using the normal low flow sampling method and tested for the normal suite of PSVP analytes (VOCs, SVOCs, low level benzidine and 3,3-DCB, metals and other inorganics). Rebound will be

tested in the subsequent quarterly sampling events after completion of the pumping. Conclusions regarding the location and quantity of the PZ-111A contamination will be assessed upon receipt of this data and the appropriate follow-up steps will be determined.

As part of the forthcoming Data Gaps Investigation Work Plan, VAS followed by a permanent well cluster is proposed in the downgradient flow direction from PZ-111A.

Attachment 1. Fall 2010 PZ-111A Investigation Analytical Results

Location ID	Elev. (ft msl)	Depth (ft bgs)	Sample Date	Analyte	Result (in ppb unless otherwise noted)	RDL	Dilution	FCV	FAV
MW-121	590.23	65 - 70	10/5/10	1,2-Dichlorobenzene	0 U	1.00	1	13	240
MW-121	590.23	65 - 70	10/5/10	1,2-Diphenylhydrazine	0 U	2.00	1	NA	NA
MW-121	590.23	65 - 70	10/5/10	3,3'-Dichlorobenzidine	0 U	0.30	1	4.50	81
MW-121	590.23	65 - 70	10/5/10	Aniline	0 U	4.00	1	4.00	36
MW-121	590.23	65 - 70	10/5/10	Benzene	3.80	1.00	1	200	1,900
MW-121	590.23	65 - 70	10/5/10	Benzidine	0.56	0.30	1	2.70	49
MW-121	590.23	65 - 70	10/5/10	Bromide (mg/L)	0 U	0.36	5	NA	NA
MW-121	590.23	65 - 70	10/5/10	Chloride (mg/L)	66.00	10	25	NA	NA
MW-121	590.23	65 - 70	10/5/10	Chlorobenzene	3.60	1.00	1	25	450
MW-121	590.23	65 - 70	10/5/10	cis-1,2-F422Dichloroethylene	0 U	1.00	1	620	11,000
MW-121	590.23	65 - 70	10/5/10	Dibutyl phthalate	0 U	5.00	1	9.70	75
MW-121	590.23	65 - 70	10/5/10	Dimethyl Phthalate	0 U	5.00	1	NA	NA
MW-121	590.23	65 - 70	10/5/10	Di-n-octyl Phthalate	0 U	5.00	1	NA	NA
MW-121	590.23	65 - 70	10/5/10	Dissolved Oxygen (DO) (mg/L)	0 U			NA	NA
MW-121	590.23	65 - 70	10/5/10	Ethylbenzene	0 U	1.00	1	18	320
MW-121	590.23	65 - 70	10/5/10	Fluoride	0 U	100	5	2,700	20,000
MW-121	590.23	65 - 70	10/5/10	Iron	1,000	200	1	NA	NA
MW-121	590.23	65 - 70	10/5/10	Iron, Ferric	0 U	200	1	NA	NA
MW-121	590.23	65 - 70	10/5/10	Iron, Ferrous	920	20	1	NA	NA
MW-121	590.23	65 - 70	10/5/10	Manganese	180	50	1	Hardness dependent	
MW-121	590.23	65 - 70	10/5/10	Methane	28	1.00	1	NA	NA
MW-121	590.23	65 - 70	10/5/10	Nitrate (as N)	0 U	100	5	NA	NA
MW-121	590.23	65 - 70	10/5/10	Nitrite (as N)	0 U	100	5	NA	NA
MW-121	590.23	65 - 70	10/5/10	o-Chloroaniline	150	100	10	NA	NA
MW-121	590.23	65 - 70	10/5/10	Orthophosphate (mg/L)	0.03	0.01	1	NA	NA
MW-121	590.23	65 - 70	10/5/10	Oxidation Reduction Potential (ORP) (mv)	-211			NA	NA
MW-121	590.23	65 - 70	10/5/10	p-Chloroaniline	0 U	10	1	NA	NA

Location ID	Elev. (ft msl)	Depth (ft bgs)	Sample Date	Analyte	Result (in ppb unless otherwise noted)	RDL	Dilution	FCV	FAV
MW-121	590.23	65 - 70	10/5/10	p-Cresol	0 U	10	1	25	450
MW-121	590.23	65 - 70	10/5/10	pH (SU)	7.42			NA	NA
MW-121	590.23	65 - 70	10/5/10	Potassium	1,500	1000	1	NA	NA
MW-121	590.23	65 - 70	10/5/10	Sodium	48,000	1000	1	NA	NA
MW-121	590.23	65 - 70	10/5/10	Specific Conductance (umhos/cm)	0.62			NA	NA
MW-121	590.23	65 - 70	10/5/10	Sulfide (mg/L)	0 U	1.00	1	NA	NA
MW-121	590.23	65 - 70	10/5/10	Temperature (Degrees F)	62.78			NA	NA
MW-121	590.23	65 - 70	10/5/10	Tetrachloroethylene	0 U	1.00	1	190	2,900
MW-121	590.23	65 - 70	10/5/10	Toluene	0 U	1.00	1	270	2,600
MW-121	590.23	65 - 70	10/5/10	Total Dissolved Solids (TDS) (mg/L)	390			NA	NA
MW-121	590.23	65 - 70	10/5/10	trans-1,2-Dichloroethylene	0 U	1.00	1	1,500	28,000
MW-121	590.23	65 - 70	10/5/10	Trichloroethylene	0 U	1.00	1	200	3,500
MW-121	590.23	65 - 70	10/5/10	Turbidity (NTU)	17			NA	NA
MW-121	590.23	65 - 70	10/5/10	Vinyl Chloride	1.40	1.00	1	930	17,000
MW-121	590.23	65 - 70	10/5/10	Xylenes (total)	0 U	3.00	1	41	730
MW-13	559.27	63 - 67	10/6/10	1,2-Dichlorobenzene	0 U	1.00	1	13	240
MW-13	559.27	63 - 67	10/6/10	1,2-Diphenylhydrazine	0 U	2.00	1	NA	NA
MW-13	559.27	63 - 67	10/6/10	3,3'-Dichlorobenzidine	0 U	0.30	1	4.50	81
MW-13	559.27	63 - 67	10/6/10	Aniline	0 U	4.00	1	4.00	36
MW-13	559.27	63 - 67	10/6/10	Benzene	0 U	1.00	1	200	1,900
MW-13	559.27	63 - 67	10/6/10	Benzidine	0 U	0.30	1	2.70	49
MW-13	559.27	63 - 67	10/6/10	Chlorobenzene	0 U	1.00	1	25	450
MW-13	559.27	63 - 67	10/6/10	cis-1,2-Dichloroethylene	0 U	1.00	1	620	11,000
MW-13	559.27	63 - 67	10/6/10	Dibutyl phthalate	0 U	5.00	1	9.70	75
MW-13	559.27	63 - 67	10/6/10	Dimethyl Phthalate	0 U	5.00	1	NA	NA
MW-13	559.27	63 - 67	10/6/10	Di-n-octyl Phthalate	0 U	5.00	1	NA	NA

Location ID	Elev. (ft msl)	Depth (ft bgs)	Sample Date	Analyte	Result (in ppb unless otherwise noted)	RDL	Dilution	FCV	FAV
MW-13	559.27	63 - 67	10/6/10	Dissolved Oxygen (DO) (mg/L)	0 U			NA	NA
MW-13	559.27	63 - 67	10/6/10	Ethylbenzene	0 U	1.00	1	18	320
MW-13	559.27	63 - 67	10/6/10	o-Chloroaniline	0 U	10	1	NA	NA
MW-13	559.27	63 - 67	10/6/10	Oxidation Reduction Potential (ORP) (mv)	-270			NA	NA
MW-13	559.27	63 - 67	10/6/10	p-Chloroaniline	0 U	10	1	NA	NA
MW-13	559.27	63 - 67	10/6/10	p-Cresol	0 U	10	1	25	450
MW-13	559.27	63 - 67	10/6/10	pH (SU)	7.96			NA	NA
MW-13	559.27	63 - 67	10/6/10	Specific Conductance (umhos/cm)	0.20			NA	NA
MW-13	559.27	63 - 67	10/6/10	Temperature (Degrees F)	53.96			NA	NA
MW-13	559.27	63 - 67	10/6/10	Tetrachloroethylene	0 U	1.00	1	190	2,900
MW-13	559.27	63 - 67	10/6/10	Toluene	0 U	1.00	1	270	2,600
MW-13	559.27	63 - 67	10/6/10	Total Dissolved Solids (TDS) (mg/L)	130			NA	NA
MW-13	559.27	63 - 67	10/6/10	trans-1,2-Dichloroethylene	0 U	1.00	1	1,500	28,000
MW-13	559.27	63 - 67	10/6/10	Trichloroethylene	0 U	1.00	1	200	3,500
MW-13	559.27	63 - 67	10/6/10	Turbidity (NTU)	56.00			NA	NA
MW-13	559.27	63 - 67	10/6/10	Vinyl Chloride	0 U	1.00	1	930	17,000
MW-13	559.27	63 - 67	10/6/10	Xylenes (total)	0 U	3.00	1	41	730
MW-51-44	613.86	42 - 44	10/7/10	1,2-Dichlorobenzene	0 U	1.00	1	13	240
MW-51-44	613.86	42 - 44	10/7/10	1,2-Diphenylhydrazine	0 U	2.00	1	NA	NA
MW-51-44	613.86	42 - 44	10/7/10	3,3'-Dichlorobenzidine	0 U	0.30	1	4.50	81
MW-51-44	613.86	42 - 44	10/7/10	Aniline	0 U	4.00	1	4.00	36
MW-51-44	613.86	42 - 44	10/7/10	Benzene	0 U	1.00	1	200	1,900
MW-51-44	613.86	42 - 44	10/7/10	Benzidine	0 U	0.30	1	2.70	49
MW-51-44	613.86	42 - 44	10/7/10	Chlorobenzene	0 U	1.00	1	25	450
MW-51-44	613.86	42 - 44	10/7/10	cis-1,2-Dichloroethylene	0 U	1.00	1	620	11,000

Location ID	Elev. (ft msl)	Depth (ft bgs)	Sample Date	Analyte	Result (in ppb unless otherwise noted)	RDL	Dilution	FCV	FAV
MW-51-44	613.86	42 - 44	10/7/10	Dibutyl phthalate	0 U	5.00	1	9.70	75
MW-51-44	613.86	42 - 44	10/7/10	Dimethyl Phthalate	0 U	5.00	1	NA	NA
MW-51-44	613.86	42 - 44	10/7/10	Di-n-octyl Phthalate	0 U	5.00	1	NA	NA
MW-51-44	613.86	42 - 44	10/7/10	Dissolved Oxygen (DO) (mg/L)	0 U			NA	NA
MW-51-44	613.86	42 - 44	10/7/10	Ethylbenzene	0 U	1.00	1	18	320
MW-51-44	613.86	42 - 44	10/7/10	o-Chloroaniline	0 U	10	1	NA	NA
MW-51-44	613.86	42 - 44	10/7/10	Oxidation Reduction Potential (ORP) (mv)	-96			NA	NA
MW-51-44	613.86	42 - 44	10/7/10	p-Chloroaniline	0 U	10	1	NA	NA
MW-51-44	613.86	42 - 44	10/7/10	p-Cresol	0 U	10	1	25	450
MW-51-44	613.86	42 - 44	10/7/10	pH (SU)	8.97			NA	NA
MW-51-44	613.86	42 - 44	10/7/10	Specific Conductance (umhos/cm)	0.23			NA	NA
MW-51-44	613.86	42 - 44	10/7/10	Temperature (Degrees F)	54.14			NA	NA
MW-51-44	613.86	42 - 44	10/7/10	Tetrachloroethylene	0 U	1.00	1	190	2,900
MW-51-44	613.86	42 - 44	10/7/10	Toluene	0 U	1.00	1	270	2,600
MW-51-44	613.86	42 - 44	10/7/10	Total Dissolved Solids (TDS) (mg/L)	150			NA	NA
MW-51-44	613.86	42 - 44	10/7/10	trans-1,2-Dichloroethylene	0 U	1.00	1	1,500	28,000
MW-51-44	613.86	42 - 44	10/7/10	Trichloroethylene	0 U	1.00	1	200	3,500
MW-51-44	613.86	42 - 44	10/7/10	Turbidity (NTU)	31			NA	NA
MW-51-44	613.86	42 - 44	10/7/10	Vinyl Chloride	0 U	1.00	1	930	17,000
MW-51-44	613.86	42 - 44	10/7/10	Xylenes (total)	0 U	3.00	1	41	730
MW-51-54	604.27	52 - 54	9/21/10	pH (SU)	8.14			NA	NA
MW-51-54	604.27	52 - 54	9/21/10	Specific Conductance (umhos/cm)	694			NA	NA
MW-51-54	604.27	52 - 54	9/21/10	Temperature (Degrees F)	61.34			NA	NA

Location ID	Elev. (ft msl)	Depth (ft bgs)	Sample Date	Analyte	Result (in ppb unless otherwise noted)	RDL	Dilution	FCV	FAV
MW-51-54	604.27	52 - 54	9/21/10	Turbidity (NTU)	39			NA	NA
MW-51-54	604.27	52 - 54	10/7/10	1,2-Dichlorobenzene	0 U	1.00	1	13	240
MW-51-54	604.27	52 - 54	10/7/10	1,2-Diphenylhydrazine	0 U	2.00	1	NA	NA
MW-51-54	604.27	52 - 54	10/7/10	3,3`-Dichlorobenzidine	0 U	0.30	1	4.50	81
MW-51-54	604.27	52 - 54	10/7/10	Aniline	0 U	4.00	1	4.00	36
MW-51-54	604.27	52 - 54	10/7/10	Benzene	0 U	1.00	1	200	1,900
MW-51-54	604.27	52 - 54	10/7/10	Benzidine	0 U	0.30	1	2.70	49
MW-51-54	604.27	52 - 54	10/7/10	Chlorobenzene	0 U	1.00	1	25	450
MW-51-54	604.27	52 - 54	10/7/10	cis-1,2-Dichloroethylene	0 U	1.00	1	620	11,000
MW-51-54	604.27	52 - 54	10/7/10	Dibutyl phthalate	0 U	5.00	1	9.70	75
MW-51-54	604.27	52 - 54	10/7/10	Dimethyl Phthalate	0 U	5.00	1	NA	NA
MW-51-54	604.27	52 - 54	10/7/10	Di-n-octyl Phthalate	0 U	5.00	1	NA	NA
MW-51-54	604.27	52 - 54	10/7/10	Dissolved Oxygen (DO) (mg/L)	0 U			NA	NA
MW-51-54	604.27	52 - 54	10/7/10	Ethylbenzene	0 U	1.00	1	18	320
MW-51-54	604.27	52 - 54	10/7/10	o-Chloroaniline	0 U	10	1	NA	NA
MW-51-54	604.27	52 - 54	10/7/10	Oxidation Reduction Potential (ORP) (mv)	-195			NA	NA
MW-51-54	604.27	52 - 54	10/7/10	p-Chloroaniline	0 U	10	1	NA	NA
MW-51-54	604.27	52 - 54	10/7/10	p-Cresol	0 U	10	1	25	450
MW-51-54	604.27	52 - 54	10/7/10	pH (SU)	8.61			NA	NA
MW-51-54	604.27	52 - 54	10/7/10	Specific Conductance (umhos/cm)	0.38			NA	NA
MW-51-54	604.27	52 - 54	10/7/10	Temperature (Degrees F)	54.32			NA	NA
MW-51-54	604.27	52 - 54	10/7/10	Tetrachloroethylene	0 U	1.00	1	190	2,900
MW-51-54	604.27	52 - 54	10/7/10	Toluene	0 U	1.00	1	270	2,600

Location ID	Elev. (ft msl)	Depth (ft bgs)	Sample Date	Analyte	Result (in ppb unless otherwise noted)	RDL	Dilution	FCV	FAV
MW-51-54	604.27	52 - 54	10/7/10	Total Dissolved Solids (TDS) (mg/L)	240			NA	NA
MW-51-54	604.27	52 - 54	10/7/10	trans-1,2-Dichloroethylene	0 U	1.00	1	1,500	28,000
MW-51-54	604.27	52 - 54	10/7/10	Trichloroethylene	0 U	1.00	1	200	3,500
MW-51-54	604.27	52 - 54	10/7/10	Turbidity (NTU)	115			NA	NA
MW-51-54	604.27	52 - 54	10/7/10	Vinyl Chloride	0 U	1.00	1	930	17,000
MW-51-54	604.27	52 - 54	10/7/10	Xylenes (total)	0 U	3.00	1	41	730
MW-85B	567.53	87 - 90	9/22/10	pH (SU)	7.81			NA	NA
MW-85B	567.53	87 - 90	9/22/10	Specific Conductance (umhos/cm)	341			NA	NA
MW-85B	567.53	87 - 90	9/22/10	Temperature (Degrees F)	62.24			NA	NA
MW-85B	567.53	87 - 90	9/22/10	Turbidity (NTU)	3.00			NA	NA
MW-85B	567.53	87 - 90	10/6/10	1,2-Dichlorobenzene	0 U	1.00	1	13	240
MW-85B	567.53	87 - 90	10/6/10	1,2-Dichlorobenzene	0 U	1.00	1	13	240
MW-85B	567.53	87 - 90	10/6/10	1,2-Diphenylhydrazine	0 U	2.00	1	NA	NA
MW-85B	567.53	87 - 90	10/6/10	1,2-Diphenylhydrazine	0 U	2.00	1	NA	NA
MW-85B	567.53	87 - 90	10/6/10	3,3`-Dichlorobenzidine	0 U	0.30	1	4.50	81
MW-85B	567.53	87 - 90	10/6/10	3,3`-Dichlorobenzidine	0 U	0.30	1	4.50	81
MW-85B	567.53	87 - 90	10/6/10	Aniline	0 U	4.00	1	4.00	36
MW-85B	567.53	87 - 90	10/6/10	Aniline	0 U	4.00	1	4.00	36
MW-85B	567.53	87 - 90	10/6/10	Benzene	0 U	1.00	1	200	1,900
MW-85B	567.53	87 - 90	10/6/10	Benzene	0 U	1.00	1	200	1,900
MW-85B	567.53	87 - 90	10/6/10	Benzidine	0 U	0.30	1	2.70	49
MW-85B	567.53	87 - 90	10/6/10	Benzidine	0 U	0.30	1	2.70	49
MW-85B	567.53	87 - 90	10/6/10	Chlorobenzene	0 U	1.00	1	25	450
MW-85B	567.53	87 - 90	10/6/10	Chlorobenzene	0 U	1.00	1	25	450
MW-85B	567.53	87 - 90	10/6/10	cis-1,2-Dichloroethylene	0 U	1.00	1	620	11,000

Location ID	Elev. (ft msl)	Depth (ft bgs)	Sample Date	Analyte	Result (in ppb unless otherwise noted)	RDL	Dilution	FCV	FAV
MW-85B	567.53	87 - 90	10/6/10	cis-1,2-Dichloroethylene	0 U	1.00	1	620	11,000
MW-85B	567.53	87 - 90	10/6/10	Dibutyl phthalate	0 U	5.00	1	9.70	75
MW-85B	567.53	87 - 90	10/6/10	Dibutyl phthalate	0 U	5.00	1	9.70	75
MW-85B	567.53	87 - 90	10/6/10	Dimethyl Phthalate	0 U	5.00	1	NA	NA
MW-85B	567.53	87 - 90	10/6/10	Dimethyl Phthalate	0 U	5.00	1	NA	NA
MW-85B	567.53	87 - 90	10/6/10	Di-n-octyl Phthalate	0 U	5.00	1	NA	NA
MW-85B	567.53	87 - 90	10/6/10	Di-n-octyl Phthalate	0 U	5.00	1	NA	NA
MW-85B	567.53	87 - 90	10/6/10	Dissolved Oxygen (DO) (mg/L)	0 U			NA	NA
MW-85B	567.53	87 - 90	10/6/10	Ethylbenzene	0 U	1.00	1	18	320
MW-85B	567.53	87 - 90	10/6/10	Ethylbenzene	0 U	1.00	1	18	320
MW-85B	567.53	87 - 90	10/6/10	o-Chloroaniline	0 U	10	1	NA	NA
MW-85B	567.53	87 - 90	10/6/10	o-Chloroaniline	0 U	10	1	NA	NA
MW-85B	567.53	87 - 90	10/6/10	Oxidation Reduction Potential (ORP) (mv)	-178			NA	NA
MW-85B	567.53	87 - 90	10/6/10	p-Chloroaniline	0 U	10	1	NA	NA
MW-85B	567.53	87 - 90	10/6/10	p-Chloroaniline	0 U	10	1	NA	NA
MW-85B	567.53	87 - 90	10/6/10	p-Cresol	0 U	10	1	25	450
MW-85B	567.53	87 - 90	10/6/10	p-Cresol	0 U	10	1	25	450
MW-85B	567.53	87 - 90	10/6/10	pH (SU)	9.57			NA	NA
MW-85B	567.53	87 - 90	10/6/10	Specific Conductance (umhos/cm)	0.07			NA	NA
MW-85B	567.53	87 - 90	10/6/10	Temperature (Degrees F)	53.96			NA	NA
MW-85B	567.53	87 - 90	10/6/10	Tetrachloroethylene	0 U	1.00	1	190	2,900
MW-85B	567.53	87 - 90	10/6/10	Tetrachloroethylene	0 U	1.00	1	190	2,900
MW-85B	567.53	87 - 90	10/6/10	Toluene	0 U	1.00	1	270	2,600
MW-85B	567.53	87 - 90	10/6/10	Toluene	0 U	1.00	1	270	2,600
MW-85B	567.53	87 - 90	10/6/10	Total Dissolved Solids (TDS) (mg/L)	40			NA	NA
MW-85B	567.53	87 - 90	10/6/10	trans-1,2-Dichloroethylene	0 U	1.00	1	1,500	28,000
MW-85B	567.53	87 - 90	10/6/10	trans-1,2-	0 U	1.00	1		

Location ID	Elev. (ft msl)	Depth (ft bgs)	Sample Date	Analyte	Result (in ppb unless otherwise noted)	RDL	Dilution	FCV	FAV
				Dichloroethylene				1,500	28,000
MW-85B	567.53	87 - 90	10/6/10	Trichloroethylene	0 U	1.00	1	200	3,500
MW-85B	567.53	87 - 90	10/6/10	Trichloroethylene	0 U	1.00	1	200	3,500
MW-85B	567.53	87 - 90	10/6/10	Turbidity (NTU)	97			NA	NA
MW-85B	567.53	87 - 90	10/6/10	Vinyl Chloride	0 U	1.00	1	930	17,000
MW-85B	567.53	87 - 90	10/6/10	Vinyl Chloride	0 U	1.00	1	930	17,000
MW-85B	567.53	87 - 90	10/6/10	Xylenes (total)	0 U	3.00	1	41	730
MW-85B	567.53	87 - 90	10/6/10	Xylenes (total)	0 U	3.00	1	41	730
MW-85C	601.70	54 - 57	9/21/10	pH (SU)	7.97			NA	NA
MW-85C	601.70	54 - 57	9/21/10	Specific Conductance (umhos/cm)	502			NA	NA
MW-85C	601.70	54 - 57	9/21/10	Temperature (Degrees F)	56.84			NA	NA
MW-85C	601.70	54 - 57	9/21/10	Turbidity (NTU)	35			NA	NA
MW-85C	601.70	54 - 57	10/6/10	1,2-Dichlorobenzene	0 U	1.00	1	13	240
MW-85C	601.70	54 - 57	10/6/10	1,2-Diphenylhydrazine	0 U	2.00	1	NA	NA
MW-85C	601.70	54 - 57	10/6/10	3,3`-Dichlorobenzidine	0 U	0.30	1	4.50	81
MW-85C	601.70	54 - 57	10/6/10	Aniline	0 U	4.00	1	4.00	36
MW-85C	601.70	54 - 57	10/6/10	Benzene	0 U	1.00	1	200	1,900
MW-85C	601.70	54 - 57	10/6/10	Benzidine	0 U	0.30	1	2.70	49
MW-85C	601.70	54 - 57	10/6/10	Chlorobenzene	0 U	1.00	1	25	450
MW-85C	601.70	54 - 57	10/6/10	cis-1,2-Dichloroethylene	0 U	1.00	1	620	11,000
MW-85C	601.70	54 - 57	10/6/10	Dibutyl phthalate	0 U	5.00	1	9.70	75
MW-85C	601.70	54 - 57	10/6/10	Dimethyl Phthalate	0 U	5.00	1	NA	NA
MW-85C	601.70	54 - 57	10/6/10	Di-n-octyl Phthalate	0 U	5.00	1	NA	NA
MW-85C	601.70	54 - 57	10/6/10	Dissolved Oxygen (DO) (mg/L)	0 U			NA	NA
MW-85C	601.70	54 - 57	10/6/10	Ethylbenzene	0 U	1.00	1	18	320
MW-85C	601.70	54 - 57	10/6/10	o-Chloroaniline	0 U	10	1	NA	NA

Location ID	Elev. (ft msl)	Depth (ft bgs)	Sample Date	Analyte	Result (in ppb unless otherwise noted)	RDL	Dilution	FCV	FAV
MW-85C	601.70	54 - 57	10/6/10	Oxidation Reduction Potential (ORP) (mv)	-233			NA	NA
MW-85C	601.70	54 - 57	10/6/10	p-Chloroaniline	0 U	10	1	NA	NA
MW-85C	601.70	54 - 57	10/6/10	p-Cresol	0 U	10	1	25	450
MW-85C	601.70	54 - 57	10/6/10	pH (SU)	7.82			NA	NA
MW-85C	601.70	54 - 57	10/6/10	Specific Conductance (umhos/cm)	0.32			NA	NA
MW-85C	601.70	54 - 57	10/6/10	Temperature (Degrees F)	54.86			NA	NA
MW-85C	601.70	54 - 57	10/6/10	Tetrachloroethylene	0 U	1.00	1	190	2,900
MW-85C	601.70	54 - 57	10/6/10	Toluene	0 U	1.00	1	270	2,600
MW-85C	601.70	54 - 57	10/6/10	Total Dissolved Solids (TDS) (mg/L)	200			NA	NA
MW-85C	601.70	54 - 57	10/6/10	trans-1,2-Dichloroethylene	0 U	1.00	1	1,500	28,000
MW-85C	601.70	54 - 57	10/6/10	Trichloroethylene	0 U	1.00	1	200	3,500
MW-85C	601.70	54 - 57	10/6/10	Turbidity (NTU)	44			NA	NA
MW-85C	601.70	54 - 57	10/6/10	Vinyl Chloride	0 U	1.00	1	930	17,000
MW-85C	601.70	54 - 57	10/6/10	Xylenes (total)	0 U	3.00	1	41	730
MW-9	615.11	40 - 44	10/6/10	1,2-Dichlorobenzene	0 U	1.00	1	13	240
MW-9	615.11	40 - 44	10/6/10	1,2-Diphenylhydrazine	0 U	2.00	1	NA	NA
MW-9	615.11	40 - 44	10/6/10	3,3'-Dichlorobenzidine	0 U	0.30	1	4.50	81
MW-9	615.11	40 - 44	10/6/10	Aniline	0 U	4.00	1	4.00	36
MW-9	615.11	40 - 44	10/6/10	Benzene	0 U	1.00	1	200	1,900
MW-9	615.11	40 - 44	10/6/10	Benzidine	0 U	0.30	1	2.70	49
MW-9	615.11	40 - 44	10/6/10	Chlorobenzene	20	1.00	1	25	450
MW-9	615.11	40 - 44	10/6/10	cis-1,2-Dichloroethylene	0 U	1.00	1	620	11,000
MW-9	615.11	40 - 44	10/6/10	Dibutyl phthalate	0 U	5.00	1	9.70	75
MW-9	615.11	40 - 44	10/6/10	Dimethyl Phthalate	0 U	5.00	1	NA	NA
MW-9	615.11	40 - 44	10/6/10	Di-n-octyl Phthalate	0 U	5.00	1	NA	NA
MW-9	615.11	40 - 44	10/6/10	Dissolved Oxygen (DO)	0 U			NA	NA

Location ID	Elev. (ft msl)	Depth (ft bgs)	Sample Date	Analyte	Result (in ppb unless otherwise noted)	RDL	Dilution	FCV	FAV
				(mg/L)					
MW-9	615.11	40 - 44	10/6/10	Ethylbenzene	0 U	1.00	1	18	320
MW-9	615.11	40 - 44	10/6/10	o-Chloroaniline	0 U	10	1	NA	NA
MW-9	615.11	40 - 44	10/6/10	Oxidation Reduction Potential (ORP) (mv)	-142			NA	NA
MW-9	615.11	40 - 44	10/6/10	p-Chloroaniline	0 U	10	1	NA	NA
MW-9	615.11	40 - 44	10/6/10	p-Cresol	0 U	10	1	25	450
MW-9	615.11	40 - 44	10/6/10	pH (SU)	8.77			NA	NA
MW-9	615.11	40 - 44	10/6/10	Specific Conductance (umhos/cm)	0.28			NA	NA
MW-9	615.11	40 - 44	10/6/10	Temperature (Degrees F)	54.32			NA	NA
MW-9	615.11	40 - 44	10/6/10	Tetrachloroethylene	1.80	1.00	1	190	2,900
MW-9	615.11	40 - 44	10/6/10	Toluene	0 U	1.00	1	270	2,600
MW-9	615.11	40 - 44	10/6/10	Total Dissolved Solids (TDS) (mg/L)	180			NA	NA
MW-9	615.11	40 - 44	10/6/10	trans-1,2-Dichloroethylene	0 U	1.00	1	1,500	28,000
MW-9	615.11	40 - 44	10/6/10	Trichloroethylene	3.20	1.00	1	200	3,500
MW-9	615.11	40 - 44	10/6/10	Turbidity (NTU)	30			NA	NA
MW-9	615.11	40 - 44	10/6/10	Vinyl Chloride	0 U	1.00	1	930	17,000
MW-9	615.11	40 - 44	10/6/10	Xylenes (total)	0 U	3.00	1	41	730
NF-LG-1			10/6/10	1,2-Dichlorobenzene	0 U	1.00	1	13	240
NF-LG-1			10/6/10	1,2-Diphenylhydrazine	0 U	2.00	1	NA	NA
NF-LG-1			10/6/10	3,3'-Dichlorobenzidine	0 U	0.30	1	4.50	81
NF-LG-1			10/6/10	Aniline	0 U	4.00	1	4.00	36
NF-LG-1			10/6/10	Benzene	0 U	1.00	1	200	1,900
NF-LG-1			10/6/10	Benzidine	0 U	0.30	1	2.70	49
NF-LG-1			10/6/10	Chlorobenzene	0 U	1.00	1	25	450
NF-LG-1			10/6/10	cis-1,2-Dichloroethylene	0 U	1.00	1	620	11,000
NF-LG-1			10/6/10	Dibutyl phthalate	0 U	5.00	1		

Location ID	Elev. (ft msl)	Depth (ft bgs)	Sample Date	Analyte	Result (in ppb unless otherwise noted)	RDL	Dilution	FCV	FAV
								9.70	75
NF-LG-1			10/6/10	Dimethyl Phthalate	0 U	5.00	1	NA	NA
NF-LG-1			10/6/10	Di-n-octyl Phthalate	0 U	5.00	1	NA	NA
NF-LG-1			10/6/10	Dissolved Oxygen (DO) (mg/L)	8.11			NA	NA
NF-LG-1			10/6/10	Ethylbenzene	0 U	1.00	1	18	320
NF-LG-1			10/6/10	o-Chloroaniline	0 U	10	1	NA	NA
NF-LG-1			10/6/10	Oxidation Reduction Potential (ORP) (mv)	-61			NA	NA
NF-LG-1			10/6/10	p-Chloroaniline	0 U	10	1	NA	NA
NF-LG-1			10/6/10	p-Cresol	0 U	10	1	25	450
NF-LG-1			10/6/10	pH (SU)	7.11			NA	NA
NF-LG-1			10/6/10	Specific Conductance (umhos/cm)	0.27			NA	NA
NF-LG-1			10/6/10	Temperature (Degrees F)	69.62			NA	NA
NF-LG-1			10/6/10	Tetrachloroethylene	0 U	1.00	1	190	2,900
NF-LG-1			10/6/10	Toluene	0 U	1.00	1	270	2,600
NF-LG-1			10/6/10	Total Dissolved Solids (TDS) (mg/L)	260			NA	NA
NF-LG-1			10/6/10	trans-1,2-Dichloroethylene	0 U	1.00	1	1,500	28,000
NF-LG-1			10/6/10	Trichloroethylene	0 U	1.00	1	200	3,500
NF-LG-1			10/6/10	Turbidity (NTU)	21			NA	NA
NF-LG-1			10/6/10	Vinyl Chloride	0 U	1.00	1	930	17,000
NF-LG-1			10/6/10	Xylenes (total)	0 U	3.00	1	41	730
OW-104A	618.76	9.2 - 14.2	9/21/10	pH (SU)	7.87			NA	NA
OW-104A	618.76	9.2 - 14.2	9/21/10	Specific Conductance (umhos/cm)	40			NA	NA
OW-104A	618.76	9.2 - 14.2	9/21/10	Temperature (Degrees F)	57.92			NA	NA
OW-104A	618.76	9.2 - 14.2	9/21/10	Turbidity (NTU)	88			NA	NA
OW-104A	618.76	9.2 - 14.2	10/6/10	1,2-Dichlorobenzene	0 U	1.00	1	13	240
OW-104A	618.76	9.2 - 14.2	10/6/10	1,2-Diphenylhydrazine	0 U	2.00	1	NA	NA

Location ID	Elev. (ft msl)	Depth (ft bgs)	Sample Date	Analyte	Result (in ppb unless otherwise noted)	RDL	Dilution	FCV	FAV
OW-104A	618.76	9.2 - 14.2	10/6/10	3,3`-Dichlorobenzidine	0 U	0.30	1	4.50	81
OW-104A	618.76	9.2 - 14.2	10/6/10	Aniline	0 U	4.00	1	4.00	36
OW-104A	618.76	9.2 - 14.2	10/6/10	Benzene	0 U	1.00	1	200	1,900
OW-104A	618.76	9.2 - 14.2	10/6/10	Benzidine	0 U	0.30	1	2.70	49
OW-104A	618.76	9.2 - 14.2	10/6/10	Chlorobenzene	0 U	1.00	1	25	450
OW-104A	618.76	9.2 - 14.2	10/6/10	cis-1,2-Dichloroethylene	0 U	1.00	1	620	11,000
OW-104A	618.76	9.2 - 14.2	10/6/10	Dibutyl phthalate	0 U	5.00	1	9.70	75
OW-104A	618.76	9.2 - 14.2	10/6/10	Dimethyl Phthalate	0 U	5.00	1	NA	NA
OW-104A	618.76	9.2 - 14.2	10/6/10	Di-n-octyl Phthalate	0 U	5.00	1	NA	NA
OW-104A	618.76	9.2 - 14.2	10/6/10	Dissolved Oxygen (DO) (mg/L)	0.59			NA	NA
OW-104A	618.76	9.2 - 14.2	10/6/10	Ethylbenzene	0 U	1.00	1	18	320
OW-104A	618.76	9.2 - 14.2	10/6/10	o-Chloroaniline	0 U	10	1	NA	NA
OW-104A	618.76	9.2 - 14.2	10/6/10	Oxidation Reduction Potential (ORP) (mv)	62.00			NA	NA
OW-104A	618.76	9.2 - 14.2	10/6/10	p-Chloroaniline	0 U	10	1	NA	NA
OW-104A	618.76	9.2 - 14.2	10/6/10	p-Cresol	0 U	10	1	25	450
OW-104A	618.76	9.2 - 14.2	10/6/10	pH (SU)	4.68			NA	NA
OW-104A	618.76	9.2 - 14.2	10/6/10	Specific Conductance (umhos/cm)	0.05			NA	NA
OW-104A	618.76	9.2 - 14.2	10/6/10	Temperature (Degrees F)	54.14			NA	NA
OW-104A	618.76	9.2 - 14.2	10/6/10	Tetrachloroethylene	0 U	1.00	1	190	2,900
OW-104A	618.76	9.2 - 14.2	10/6/10	Toluene	0 U	1.00	1	270	2,600
OW-104A	618.76	9.2 - 14.2	10/6/10	Total Dissolved Solids (TDS) (mg/L)	40			NA	NA
OW-104A	618.76	9.2 - 14.2	10/6/10	trans-1,2-Dichloroethylene	0 U	1.00	1	1,500	28,000
OW-104A	618.76	9.2 - 14.2	10/6/10	Trichloroethylene	0 U	1.00	1	200	3,500

Location ID	Elev. (ft msl)	Depth (ft bgs)	Sample Date	Analyte	Result (in ppb unless otherwise noted)	RDL	Dilution	FCV	FAV
OW-104A	618.76	9.2 - 14.2	10/6/10	Turbidity (NTU)	2.00			NA	NA
OW-104A	618.76	9.2 - 14.2	10/6/10	Vinyl Chloride	0 U	1.00	1	930	17,000
OW-104A	618.76	9.2 - 14.2	10/6/10	Xylenes (total)	0 U	3.00	1	41	730
P-104B	595.42	32.3 - 37.3	9/21/10	pH (SU)	7.88			NA	NA
P-104B	595.42	32.3 - 37.3	9/21/10	Specific Conductance (umhos/cm)	494			NA	NA
P-104B	595.42	32.3 - 37.3	9/21/10	Temperature (Degrees F)	50.36			NA	NA
P-104B	595.42	32.3 - 37.3	9/21/10	Turbidity (NTU)	1.00			NA	NA
P-104B	595.42	32.3 - 37.3	10/6/10	1,2-Dichlorobenzene	0 U	1.00	1	13	240
P-104B	595.42	32.3 - 37.3	10/6/10	1,2-Diphenylhydrazine	0 U	2.00	1	NA	NA
P-104B	595.42	32.3 - 37.3	10/6/10	3,3`-Dichlorobenzidine	0 U	0.30	1	4.50	81
P-104B	595.42	32.3 - 37.3	10/6/10	Aniline	0 U	4.00	1	4.00	36
P-104B	595.42	32.3 - 37.3	10/6/10	Benzene	0 U	1.00	1	200	1,900
P-104B	595.42	32.3 - 37.3	10/6/10	Benzidine	0 U	0.30	1	2.70	49
P-104B	595.42	32.3 - 37.3	10/6/10	Chlorobenzene	0 U	1.00	1	25	450
P-104B	595.42	32.3 - 37.3	10/6/10	cis-1,2-Dichloroethylene	0 U	1.00	1	620	11,000
P-104B	595.42	32.3 - 37.3	10/6/10	Dibutyl phthalate	0 U	5.00	1	9.70	75
P-104B	595.42	32.3 - 37.3	10/6/10	Dimethyl Phthalate	0 U	5.00	1	NA	NA
P-104B	595.42	32.3 - 37.3	10/6/10	Di-n-octyl Phthalate	0 U	5.00	1	NA	NA
P-104B	595.42	32.3 - 37.3	10/6/10	Dissolved Oxygen (DO) (mg/L)	0 U			NA	NA
P-104B	595.42	32.3 - 37.3	10/6/10	Ethylbenzene	0 U	1.00	1	18	320
P-104B	595.42	32.3 - 37.3	10/6/10	o-Chloroaniline	0 U	10	1	NA	NA
P-104B	595.42	32.3 - 37.3	10/6/10	Oxidation Reduction Potential (ORP) (mv)	-194			NA	NA
P-104B	595.42	32.3 - 37.3	10/6/10	p-Chloroaniline	0 U	10	1	NA	NA

Location ID	Elev. (ft msl)	Depth (ft bgs)	Sample Date	Analyte	Result (in ppb unless otherwise noted)	RDL	Dilution	FCV	FAV
P-104B	595.42	32.3 - 37.3	10/6/10	p-Cresol	0 U	10	1	25	450
P-104B	595.42	32.3 - 37.3	10/6/10	pH (SU)	6.92			NA	NA
P-104B	595.42	32.3 - 37.3	10/6/10	Specific Conductance (umhos/cm)	0.35			NA	NA
P-104B	595.42	32.3 - 37.3	10/6/10	Temperature (Degrees F)	75.56			NA	NA
P-104B	595.42	32.3 - 37.3	10/6/10	Tetrachloroethylene	0 U	1.00	1	190	2,900
P-104B	595.42	32.3 - 37.3	10/6/10	Toluene	0 U	1.00	1	270	2,600
P-104B	595.42	32.3 - 37.3	10/6/10	Total Dissolved Solids (TDS) (mg/L)	230			NA	NA
P-104B	595.42	32.3 - 37.3	10/6/10	trans-1,2-Dichloroethylene	0 U	1.00	1	1,500	28,000
P-104B	595.42	32.3 - 37.3	10/6/10	Trichloroethylene	0 U	1.00	1	200	3,500
P-104B	595.42	32.3 - 37.3	10/6/10	Turbidity (NTU)	7.00			NA	NA
P-104B	595.42	32.3 - 37.3	10/6/10	Vinyl Chloride	0 U	1.00	1	930	17,000
P-104B	595.42	32.3 - 37.3	10/6/10	Xylenes (total)	0 U	3.00	1	41	730
P-104C	566.65	61.1 - 66.1	9/21/10	pH (SU)	8.10			NA	NA
P-104C	566.65	61.1 - 66.1	9/21/10	Specific Conductance (umhos/cm)	191			NA	NA
P-104C	566.65	61.1 - 66.1	9/21/10	Temperature (Degrees F)	54.14			NA	NA
P-104C	566.65	61.1 - 66.1	9/21/10	Turbidity (NTU)	2.00			NA	NA
P-104C	566.65	61.1 - 66.1	10/6/10	1,2-Dichlorobenzene	0 U	1.00	1	13	240
P-104C	566.65	61.1 - 66.1	10/6/10	1,2-Dichlorobenzene	0 U	1.00	1	13	240
P-104C	566.65	61.1 - 66.1	10/6/10	1,2-Diphenylhydrazine	0 U	2.00	1	NA	NA
P-104C	566.65	61.1 - 66.1	10/6/10	1,2-Diphenylhydrazine	0 U	2.00	1	NA	NA
P-104C	566.65	61.1 - 66.1	10/6/10	3,3'-Dichlorobenzidine	0 U	0.30	1	4.50	81
P-104C	566.65	61.1 - 66.1	10/6/10	3,3'-Dichlorobenzidine	0 U	0.30	1	4.50	81
P-104C	566.65	61.1 - 66.1	10/6/10	Aniline	0 U	4.00	1	4.00	36

Location ID	Elev. (ft msl)	Depth (ft bgs)	Sample Date	Analyte	Result (in ppb unless otherwise noted)	RDL	Dilution	FCV	FAV
P-104C	566.65	61.1 - 66.1	10/6/10	Aniline	0 U	4.00	1	4.00	36
P-104C	566.65	61.1 - 66.1	10/6/10	Benzene	0 U	1.00	1	200	1,900
P-104C	566.65	61.1 - 66.1	10/6/10	Benzene	0 U	1.00	1	200	1,900
P-104C	566.65	61.1 - 66.1	10/6/10	Benzidine	0 U	0.30	1	2.70	49
P-104C	566.65	61.1 - 66.1	10/6/10	Benzidine	0 U	0.30	1	2.70	49
P-104C	566.65	61.1 - 66.1	10/6/10	Chlorobenzene	0 U	1.00	1	25	450
P-104C	566.65	61.1 - 66.1	10/6/10	Chlorobenzene	0 U	1.00	1	25	450
P-104C	566.65	61.1 - 66.1	10/6/10	cis-1,2-Dichloroethylene	0 U	1.00	1	620	11,000
P-104C	566.65	61.1 - 66.1	10/6/10	cis-1,2-Dichloroethylene	0 U	1.00	1	620	11,000
P-104C	566.65	61.1 - 66.1	10/6/10	Dibutyl phthalate	0 U	5.00	1	9.70	75
P-104C	566.65	61.1 - 66.1	10/6/10	Dibutyl phthalate	0 U	5.00	1	9.70	75
P-104C	566.65	61.1 - 66.1	10/6/10	Dimethyl Phthalate	0 U	5.00	1	NA	NA
P-104C	566.65	61.1 - 66.1	10/6/10	Dimethyl Phthalate	0 U	5.00	1	NA	NA
P-104C	566.65	61.1 - 66.1	10/6/10	Di-n-octyl Phthalate	0 U	5.00	1	NA	NA
P-104C	566.65	61.1 - 66.1	10/6/10	Di-n-octyl Phthalate	0 U	5.00	1	NA	NA
P-104C	566.65	61.1 - 66.1	10/6/10	Dissolved Oxygen (DO) (mg/L)	0 U			NA	NA
P-104C	566.65	61.1 - 66.1	10/6/10	Ethylbenzene	0 U	1.00	1	18	320
P-104C	566.65	61.1 - 66.1	10/6/10	Ethylbenzene	0 U	1.00	1	18	320
P-104C	566.65	61.1 - 66.1	10/6/10	o-Chloroaniline	0 U	10	1	NA	NA
P-104C	566.65	61.1 - 66.1	10/6/10	o-Chloroaniline	0 U	10	1	NA	NA
P-104C	566.65	61.1 - 66.1	10/6/10	Oxidation Reduction Potential (ORP) (mv)	-214			NA	NA
P-104C	566.65	61.1 - 66.1	10/6/10	p-Chloroaniline	0 U	10	1	NA	NA
P-104C	566.65	61.1 - 66.1	10/6/10	p-Chloroaniline	0 U	10	1	NA	NA

Location ID	Elev. (ft msl)	Depth (ft bgs)	Sample Date	Analyte	Result (in ppb unless otherwise noted)	RDL	Dilution	FCV	FAV
P-104C	566.65	61.1 - 66.1	10/6/10	p-Cresol	0 U	10	1	25	450
P-104C	566.65	61.1 - 66.1	10/6/10	p-Cresol	0 U	10	1	25	450
P-104C	566.65	61.1 - 66.1	10/6/10	pH (SU)	6.47			NA	NA
P-104C	566.65	61.1 - 66.1	10/6/10	Specific Conductance (umhos/cm)	0.14			NA	NA
P-104C	566.65	61.1 - 66.1	10/6/10	Temperature (Degrees F)	56.48			NA	NA
P-104C	566.65	61.1 - 66.1	10/6/10	Tetrachloroethylene	0 U	1.00	1	190	2,900
P-104C	566.65	61.1 - 66.1	10/6/10	Tetrachloroethylene	0 U	1.00	1	190	2,900
P-104C	566.65	61.1 - 66.1	10/6/10	Toluene	0 U	1.00	1	270	2,600
P-104C	566.65	61.1 - 66.1	10/6/10	Toluene	0 U	1.00	1	270	2,600
P-104C	566.65	61.1 - 66.1	10/6/10	Total Dissolved Solids (TDS) (mg/L)	90			NA	NA
P-104C	566.65	61.1 - 66.1	10/6/10	trans-1,2-Dichloroethylene	0 U	1.00	1	1,500	28,000
P-104C	566.65	61.1 - 66.1	10/6/10	trans-1,2-Dichloroethylene	0 U	1.00	1	1,500	28,000
P-104C	566.65	61.1 - 66.1	10/6/10	Trichloroethylene	0 U	1.00	1	200	3,500
P-104C	566.65	61.1 - 66.1	10/6/10	Trichloroethylene	0 U	1.00	1	200	3,500
P-104C	566.65	61.1 - 66.1	10/6/10	Turbidity (NTU)	0 U			NA	NA
P-104C	566.65	61.1 - 66.1	10/6/10	Vinyl Chloride	0 U	1.00	1	930	17,000
P-104C	566.65	61.1 - 66.1	10/6/10	Vinyl Chloride	0 U	1.00	1	930	17,000
P-104C	566.65	61.1 - 66.1	10/6/10	Xylenes (total)	0 U	3.00	1	41	730
P-104C	566.65	61.1 - 66.1	10/6/10	Xylenes (total)	0 U	3.00	1	41	730
P-105B	593.58	61.14 - 66.14	9/22/10	pH (SU)	8.06			NA	NA
P-105B	593.58	61.14 - 66.14	9/22/10	Specific Conductance (umhos/cm)	534			NA	NA
P-105B	593.58	61.14 - 66.14	9/22/10	Temperature (Degrees F)	55.58			NA	NA
P-105B	593.58	61.14 - 66.14	9/22/10	Turbidity (NTU)	6.00			NA	NA

Location ID	Elev. (ft msl)	Depth (ft bgs)	Sample Date	Analyte	Result (in ppb unless otherwise noted)	RDL	Dilution	FCV	FAV
P-105B	593.58	61.14 - 66.14	10/6/10	1,2-Dichlorobenzene	0 U	1.00	1	13	240
P-105B	593.58	61.14 - 66.14	10/6/10	1,2-Diphenylhydrazine	0 U	2.00	1	NA	NA
P-105B	593.58	61.14 - 66.14	10/6/10	3,3`-Dichlorobenzidine	0 U	0.30	1	4.50	81
P-105B	593.58	61.14 - 66.14	10/6/10	Aniline	0 U	4.00	1	4.00	36
P-105B	593.58	61.14 - 66.14	10/6/10	Benzene	0 U	1.00	1	200	1,900
P-105B	593.58	61.14 - 66.14	10/6/10	Benzidine	0 U	0.30	1	2.70	49
P-105B	593.58	61.14 - 66.14	10/6/10	Chlorobenzene	0 U	1.00	1	25	450
P-105B	593.58	61.14 - 66.14	10/6/10	cis-1,2-Dichloroethylene	0 U	1.00	1	620	11,000
P-105B	593.58	61.14 - 66.14	10/6/10	Dibutyl phthalate	0 U	5.00	1	9.70	75
P-105B	593.58	61.14 - 66.14	10/6/10	Dimethyl Phthalate	0 U	5.00	1	NA	NA
P-105B	593.58	61.14 - 66.14	10/6/10	Di-n-octyl Phthalate	0 U	5.00	1	NA	NA
P-105B	593.58	61.14 - 66.14	10/6/10	Dissolved Oxygen (DO) (mg/L)	0 U			NA	NA
P-105B	593.58	61.14 - 66.14	10/6/10	Ethylbenzene	0 U	1.00	1	18	320
P-105B	593.58	61.14 - 66.14	10/6/10	o-Chloroaniline	0 U	10	1	NA	NA
P-105B	593.58	61.14 - 66.14	10/6/10	Oxidation Reduction Potential (ORP) (mv)	-194			NA	NA
P-105B	593.58	61.14 - 66.14	10/6/10	p-Chloroaniline	0 U	10	1	NA	NA
P-105B	593.58	61.14 - 66.14	10/6/10	p-Cresol	0 U	10	1	25	450
P-105B	593.58	61.14 - 66.14	10/6/10	pH (SU)	7.59			NA	NA
P-105B	593.58	61.14 - 66.14	10/6/10	Specific Conductance (umhos/cm)	0.36			NA	NA
P-105B	593.58	61.14 - 66.14	10/6/10	Temperature (Degrees F)	60.80			NA	NA
P-105B	593.58	61.14 - 66.14	10/6/10	Tetrachloroethylene	0 U	1.00	1	190	2,900
P-105B	593.58	61.14 - 66.14	10/6/10	Toluene	0 U	1.00	1	270	2,600
P-105B	593.58	61.14 - 66.14	10/6/10	Total Dissolved Solids (TDS) (mg/L)	260			NA	NA

Location ID	Elev. (ft msl)	Depth (ft bgs)	Sample Date	Analyte	Result (in ppb unless otherwise noted)	RDL	Dilution	FCV	FAV
P-105B	593.58	61.14 - 66.14	10/6/10	trans-1,2-Dichloroethylene	0 U	1.00	1	1,500	28,000
P-105B	593.58	61.14 - 66.14	10/6/10	Trichloroethylene	0 U	1.00	1	200	3,500
P-105B	593.58	61.14 - 66.14	10/6/10	Turbidity (NTU)	25			NA	NA
P-105B	593.58	61.14 - 66.14	10/6/10	Vinyl Chloride	0 U	1.00	1	930	17,000
P-105B	593.58	61.14 - 66.14	10/6/10	Xylenes (total)	0 U	3.00	1	41	730
PZ-111A	601.05	50 - 55	1/6/10	2-amino 5-chlorotoluenesulfonic acid	0 U		1	NA	NA
PZ-111A	601.05	50 - 55	1/6/10	2-chloro,4aminotoluene	0 U		1	NA	NA
PZ-111A	601.05	50 - 55	1/6/10	Dimethylformamide	0 U		1	NA	NA
PZ-111A	601.05	50 - 55	1/6/10	Dipropylamine	0 U		1	NA	NA
PZ-111A	601.05	50 - 55	1/6/10	p-Toluidine	0 U		1	NA	NA
PZ-111A	601.05	50 - 55	1/6/10	Tetranitromethane	0 U		50	NA	NA
PZ-111A	601.05	50 - 55	3/8/10	2-Amino-5-Chlorotoluene Sulfonic Acid	0 U		1	NA	NA
PZ-111A	601.05	50 - 55	3/8/10	2-Chloro-4-Aminotoluene	0 U		1	NA	NA
PZ-111A	601.05	50 - 55	3/8/10	Benzenamine, 4-methyl-	0 U		1	NA	NA
PZ-111A	601.05	50 - 55	3/8/10	Dipropylamine	0 U		1	NA	NA
PZ-111A	601.05	50 - 55	3/8/10	N,N-Dimethylformamide	0 U		1	NA	NA
PZ-111A	601.05	50 - 55	3/8/10	Phosphorus trichloride	0 U		1	NA	NA
PZ-111A	601.05	50 - 55	9/23/10	1,2-Dichlorobenzene	0 UD	100	100	13	240
PZ-111A	601.05	50 - 55	9/23/10	1,2-Diphenylhydrazine	0 U	2.00	1	NA	NA
PZ-111A	601.05	50 - 55	9/23/10	3,3'-Dichlorobenzidine	0 U	0.30	1	4.50	81
PZ-111A	601.05	50 - 55	9/23/10	Aluminum	160	50	1	NA	NA
PZ-111A	601.05	50 - 55	9/23/10	Ammonia (as N) (mg/L)	0.78	0.02	1	NA	NA
PZ-111A	601.05	50 - 55	9/23/10	Aniline	0 U	4.00	1	4.00	36
PZ-111A	601.05	50 - 55	9/23/10	Antimony	0 U	2.00	1	240	2,300
PZ-111A	601.05	50 - 55	9/23/10	Arsenic	19	5.00	1	150	680
PZ-111A	601.05	50 - 55	9/23/10	Barium	0 U	100	1	Hardness dependent	

Location ID	Elev. (ft msl)	Depth (ft bgs)	Sample Date	Analyte	Result (in ppb unless otherwise noted)	RDL	Dilution	FCV	FAV
PZ-111A	601.05	50 - 55	9/23/10	Benzene	0 UD	100	100	200	1,900
PZ-111A	601.05	50 - 55	9/23/10	Benzidine	0 U	0.30	1	2.70	49
PZ-111A	601.05	50 - 55	9/23/10	Beryllium	0 U	1.00	1	Hardness dependent	
PZ-111A	601.05	50 - 55	9/23/10	Bromide (mg/L)	0 UD	0.36	5	NA	NA
PZ-111A	601.05	50 - 55	9/23/10	Cadmium	0 U	1.00	1	NA	NA
PZ-111A	601.05	50 - 55	9/23/10	Chemical Oxygen Demand (COD) (mg/L)	320	50	1	NA	NA
PZ-111A	601.05	50 - 55	9/23/10	Chloride (mg/L)	27 D	10	10	NA	NA
PZ-111A	601.05	50 - 55	9/23/10	Chlorobenzene	2700 D	100	100	25	450
PZ-111A	601.05	50 - 55	9/23/10	cis-1,2-Dichloroethylene	2200 D	100	100	620	11,000
PZ-111A	601.05	50 - 55	9/23/10	Copper	0 U	4.00	1	NA	NA
PZ-111A	601.05	50 - 55	9/23/10	Dibutyl Phthalate	0 U	5.00	1	9.70	75
PZ-111A	601.05	50 - 55	9/23/10	Dimethyl Phthalate	0 U	5.00	1	NA	NA
PZ-111A	601.05	50 - 55	9/23/10	Di-n-octyl Phthalate	0 U	5.00	1	NA	NA
PZ-111A	601.05	50 - 55	9/23/10	Dissolved Oxygen (DO) (mg/L)	0 U			NA	NA
PZ-111A	601.05	50 - 55	9/23/10	Ethylbenzene	0 UD	100	100	18	320
PZ-111A	601.05	50 - 55	9/23/10	Fluoride	0 UD	100	5	2,700	20,000
PZ-111A	601.05	50 - 55	9/23/10	Iron	8,700	200	1	NA	NA
PZ-111A	601.05	50 - 55	9/23/10	Iron	9,600	200	1	NA	NA
PZ-111A	601.05	50 - 55	9/23/10	Iron, Ferric	0 UD	450	2500	NA	NA
PZ-111A	601.05	50 - 55	9/23/10	Iron, Ferrous	11000 D	450	25	NA	NA
PZ-111A	601.05	50 - 55	9/23/10	Lead	0 U	3.00	1	NA	NA
PZ-111A	601.05	50 - 55	9/23/10	Manganese	520	50	1	Hardness dependent	
PZ-111A	601.05	50 - 55	9/23/10	Mercury	0 U	0.20	1	0.77	2.80
PZ-111A	601.05	50 - 55	9/23/10	Methane	5700 D	100	100	NA	NA
PZ-111A	601.05	50 - 55	9/23/10	Nickel	0 U	20	1	NA	NA
PZ-111A	601.05	50 - 55	9/23/10	Nitrate (as N)	360 D	100	5	NA	NA
PZ-111A	601.05	50 - 55	9/23/10	Nitrite (as N)	0 UD	100	5	NA	NA
PZ-111A	601.05	50 - 55	9/23/10	Orthophosphate (mg/L)	0.04	0.01	1	NA	NA

Location ID	Elev. (ft msl)	Depth (ft bgs)	Sample Date	Analyte	Result (in ppb unless otherwise noted)	RDL	Dilution	FCV	FAV
PZ-111A	601.05	50 - 55	9/23/10	Oxidation Reduction Potential (ORP) (mv)	-164			NA	NA
PZ-111A	601.05	50 - 55	9/23/10	p-Chloroaniline	220 D	100	10	NA	NA
PZ-111A	601.05	50 - 55	9/23/10	pH (SU)	7.24			NA	NA
PZ-111A	601.05	50 - 55	9/23/10	Potassium	1,900	1000	1	NA	NA
PZ-111A	601.05	50 - 55	9/23/10	Residue, dissolved (mg/L)	506	50	1	NA	NA
PZ-111A	601.05	50 - 55	9/23/10	Residue, Suspended (mg/L)	48.30	8.20	1	NA	NA
PZ-111A	601.05	50 - 55	9/23/10	Silver	0 U	0.20	1	0.06	1.10
PZ-111A	601.05	50 - 55	9/23/10	Sodium	59,000	1000	1	NA	NA
PZ-111A	601.05	50 - 55	9/23/10	Specific Conductance (umhos/cm)	0.92			NA	NA
PZ-111A	601.05	50 - 55	9/23/10	Sulfate (mg/L)	1.80	1.00	1	NA	NA
PZ-111A	601.05	50 - 55	9/23/10	Sulfide (mg/L)	0 U	1.00	1	NA	NA
PZ-111A	601.05	50 - 55	9/23/10	Sulfite, screening (mg/L)	0 U	1.00	1	NA	NA
PZ-111A	601.05	50 - 55	9/23/10	Temperature (Degrees F)	57.74			NA	NA
PZ-111A	601.05	50 - 55	9/23/10	Tetrachloroethylene	0 UD	100	100	190	2,900
PZ-111A	601.05	50 - 55	9/23/10	Toluene	180000 D	2000	2000	270	2,600
PZ-111A	601.05	50 - 55	9/23/10	Total Dissolved Solids (TDS) (mg/L)	600			NA	NA
PZ-111A	601.05	50 - 55	9/23/10	trans-1,2-Dichloroethylene	0 UD	100	100	1,500	28,000
PZ-111A	601.05	50 - 55	9/23/10	Trichloroethylene	0 UD	100	100	200	3,500
PZ-111A	601.05	50 - 55	9/23/10	Turbidity (NTU)	42			NA	NA
PZ-111A	601.05	50 - 55	9/23/10	Vanadium	0 U	4.00	1	12	220
PZ-111A	601.05	50 - 55	9/23/10	Vinyl Chloride	330 D	100	100	930	17,000
PZ-111A	601.05	50 - 55	9/23/10	Xylenes (Total)	0 UD	300	100	41	730
PZ-111A	601.05	50 - 55	9/23/10	Zinc	0 U	50	1	NA	NA
PZ-111B	570.56	81 - 86	1/6/10	2-amino 5-chlorotoluenesulfonic acid	0 U		1	NA	NA
PZ-111B	570.56	81 - 86	1/6/10	2-chloro,4aminotoluene	0 U		1	NA	NA

Location ID	Elev. (ft msl)	Depth (ft bgs)	Sample Date	Analyte	Result (in ppb unless otherwise noted)	RDL	Dilution	FCV	FAV
PZ-111B	570.56	81 - 86	1/6/10	Dimethylformamide	0 U		1	NA	NA
PZ-111B	570.56	81 - 86	1/6/10	Dipropylamine	0 U		1	NA	NA
PZ-111B	570.56	81 - 86	1/6/10	p-Toluidine	0 U		1	NA	NA
PZ-111B	570.56	81 - 86	1/6/10	Tetranitromethane	0 U		1	NA	NA
PZ-111B	570.56	81 - 86	1/6/10	2-amino 5-chloro-toluenesulfonic acid	0 U		1	NA	NA
PZ-111B	570.56	81 - 86	1/6/10	2-chloro,4aminotoluene	0 U		1	NA	NA
PZ-111B	570.56	81 - 86	1/6/10	Dimethylformamide	0 U		1	NA	NA
PZ-111B	570.56	81 - 86	1/6/10	Dipropylamine	0 U		1	NA	NA
PZ-111B	570.56	81 - 86	1/6/10	p-Toluidine	0 U		1	NA	NA
PZ-111B	570.56	81 - 86	1/6/10	Tetranitromethane	0 U		1	NA	NA
PZ-111B	570.56	81 - 86	3/8/10	2-Amino-5-Chlorotoluene Sulfonic Acid	0 U		1	NA	NA
PZ-111B	570.56	81 - 86	3/8/10	2-Chloro-4-Aminotoluene	0 U		1	NA	NA
PZ-111B	570.56	81 - 86	3/8/10	Benzamine, 4-methyl-	0 U		1	NA	NA
PZ-111B	570.56	81 - 86	3/8/10	Dipropylamine	0 U		1	NA	NA
PZ-111B	570.56	81 - 86	3/8/10	N,N-Dimethylformamide	0 U		1	NA	NA
PZ-111B	570.56	81 - 86	3/8/10	Phosphorus trichloride	0 U		1	NA	NA
PZ-111B	570.56	81 - 86	9/23/10	1,2-Dichlorobenzene	0 U	1.00	1	13	240
PZ-111B	570.56	81 - 86	9/23/10	1,2-Diphenylhydrazine	0 U	2.00	1	NA	NA
PZ-111B	570.56	81 - 86	9/23/10	3,3'-Dichlorobenzidine	0 U	0.30	1	4.50	81
PZ-111B	570.56	81 - 86	9/23/10	Aluminum	110	50	1	NA	NA
PZ-111B	570.56	81 - 86	9/23/10	Ammonia (as N) (mg/L)	0.20	0.02	1	NA	NA
PZ-111B	570.56	81 - 86	9/23/10	Aniline	0 U	4.00	1	4.00	36
PZ-111B	570.56	81 - 86	9/23/10	Antimony	0 U	2.00	1	240	2,300
PZ-111B	570.56	81 - 86	9/23/10	Arsenic	0 U	5.00	1	150	680
PZ-111B	570.56	81 - 86	9/23/10	Barium	0 U	100	1	Hardness dependent	
PZ-111B	570.56	81 - 86	9/23/10	Benzene	7.20	1.00	1	200	1,900
PZ-111B	570.56	81 - 86	9/23/10	Benzidine	0 U	0.30	1	2.70	49
PZ-111B	570.56	81 - 86	9/23/10	Beryllium	0 U	1.00	1	Hardness	

Location ID	Elev. (ft msl)	Depth (ft bgs)	Sample Date	Analyte	Result (in ppb unless otherwise noted)	RDL	Dilution	FCV	FAV
								dependent	
PZ-111B	570.56	81 - 86	9/23/10	Bromide (mg/L)	0 UD	0.36	5	NA	NA
PZ-111B	570.56	81 - 86	9/23/10	Cadmium	0 U	1.00	1	NA	NA
PZ-111B	570.56	81 - 86	9/23/10	Chemical Oxygen Demand (COD) (mg/L)	6.40	5.00	1	NA	NA
PZ-111B	570.56	81 - 86	9/23/10	Chloride (mg/L)	0 UD	10	5	NA	NA
PZ-111B	570.56	81 - 86	9/23/10	Chlorobenzene	0 U	1.00	1	25	450
PZ-111B	570.56	81 - 86	9/23/10	cis-1,2-Dichloroethylene	0 U	1.00	1	620	11,000
PZ-111B	570.56	81 - 86	9/23/10	Copper	0 U	4.00	1	NA	NA
PZ-111B	570.56	81 - 86	9/23/10	Dibutyl Phthalate	0 U	5.00	1	9.70	75
PZ-111B	570.56	81 - 86	9/23/10	Dimethyl Phthalate	0 U	5.00	1	NA	NA
PZ-111B	570.56	81 - 86	9/23/10	Di-n-octyl Phthalate	0 U	5.00	1	NA	NA
PZ-111B	570.56	81 - 86	9/23/10	Dissolved Oxygen (DO) (mg/L)	0 U			NA	NA
PZ-111B	570.56	81 - 86	9/23/10	Ethylbenzene	0 U	1.00	1	18	320
PZ-111B	570.56	81 - 86	9/23/10	Fluoride	0 UD	100	5	2,700	20,000
PZ-111B	570.56	81 - 86	9/23/10	Iron	340	200	1	NA	NA
PZ-111B	570.56	81 - 86	9/23/10	Iron	2,300	200	1	NA	NA
PZ-111B	570.56	81 - 86	9/23/10	Iron, Ferric	0 UD	200	100	NA	NA
PZ-111B	570.56	81 - 86	9/23/10	Iron, Ferrous	250	20	1	NA	NA
PZ-111B	570.56	81 - 86	9/23/10	Lead	0 U	3.00	1	NA	NA
PZ-111B	570.56	81 - 86	9/23/10	Manganese	83	50	1	Hardness dependent	
PZ-111B	570.56	81 - 86	9/23/10	Mercury	0 U	0.20	1	0.77	2.80
PZ-111B	570.56	81 - 86	9/23/10	Methane	4.40	1.00	1	NA	NA
PZ-111B	570.56	81 - 86	9/23/10	Nickel	0 U	20	1	NA	NA
PZ-111B	570.56	81 - 86	9/23/10	Nitrate (as N)	0 UD	100	5	NA	NA
PZ-111B	570.56	81 - 86	9/23/10	Nitrite (as N)	0 UD	100	5	NA	NA
PZ-111B	570.56	81 - 86	9/23/10	o-Chloroaniline	22	10	1	NA	NA
PZ-111B	570.56	81 - 86	9/23/10	Orthophosphate (mg/L)	0.02	0.01	1	NA	NA
PZ-111B	570.56	81 - 86	9/23/10	Oxidation Reduction Potential (ORP) (mv)	-217			NA	NA
PZ-111B	570.56	81 - 86	9/23/10	p-Chloroaniline	0 U	10	1	NA	NA
PZ-111B	570.56	81 - 86	9/23/10	p-Cresol	0 U	10	1		

Location ID	Elev. (ft msl)	Depth (ft bgs)	Sample Date	Analyte	Result (in ppb unless otherwise noted)	RDL	Dilution	FCV	FAV
								25	450
PZ-111B	570.56	81 - 86	9/23/10	pH (SU)	7.57			NA	NA
PZ-111B	570.56	81 - 86	9/23/10	Potassium	0 U	1000	1	NA	NA
PZ-111B	570.56	81 - 86	9/23/10	Residue, dissolved (mg/L)	152	50	1	NA	NA
PZ-111B	570.56	81 - 86	9/23/10	Residue, Suspended (mg/L)	3.50	3.30	1	NA	NA
PZ-111B	570.56	81 - 86	9/23/10	Silver	0 U	0.20	1	0.06	1.10
PZ-111B	570.56	81 - 86	9/23/10	Sodium	9,800	1000	1	NA	NA
PZ-111B	570.56	81 - 86	9/23/10	Specific Conductance (umhos/cm)	0.27			NA	NA
PZ-111B	570.56	81 - 86	9/23/10	Sulfate (mg/L)	24	5.00	1	NA	NA
PZ-111B	570.56	81 - 86	9/23/10	Sulfide (mg/L)	0 U	1.00	1	NA	NA
PZ-111B	570.56	81 - 86	9/23/10	Sulfite, screening (mg/L)	0 U	1.00	1	NA	NA
PZ-111B	570.56	81 - 86	9/23/10	Temperature (Degrees F)	58.28			NA	NA
PZ-111B	570.56	81 - 86	9/23/10	Tetrachloroethylene	0 U	1.00	1	190	2,900
PZ-111B	570.56	81 - 86	9/23/10	Toluene	0 U	1.00	1	270	2,600
PZ-111B	570.56	81 - 86	9/23/10	Total Dissolved Solids (TDS) (mg/L)	180			NA	NA
PZ-111B	570.56	81 - 86	9/23/10	trans-1,2-Dichloroethylene	0 U	1.00	1	1,500	28,000
PZ-111B	570.56	81 - 86	9/23/10	Trichloroethylene	0 U	1.00	1	200	3,500
PZ-111B	570.56	81 - 86	9/23/10	Turbidity (NTU)	26			NA	NA
PZ-111B	570.56	81 - 86	9/23/10	Vanadium	0 U	4.00	1	12	220
PZ-111B	570.56	81 - 86	9/23/10	Vinyl Chloride	0 U	1.00	1	930	17,000
PZ-111B	570.56	81 - 86	9/23/10	Xylenes (Total)	0 U	3.00	1	41	730
PZ-111B	570.56	81 - 86	9/23/10	Zinc	0 U	50	1	NA	NA
PZ-111-VAS	627.44	21- 25	10/22/10	1,2-Dichlorobenzene	0 U	1.00	1	13	240
PZ-111-VAS	627.44	21- 25	10/22/10	1,2-Diphenylhydrazine	0 U	2.00	1	NA	NA
PZ-111-VAS	627.44	21- 25	10/22/10	3,3'-Dichlorobenzidine	0 U	0.30	1	4.50	81

Location ID	Elev. (ft msl)	Depth (ft bgs)	Sample Date	Analyte	Result (in ppb unless otherwise noted)	RDL	Dilution	FCV	FAV
PZ-111-VAS	627.44	21- 25	10/22/10	Aniline	0 U	4.00	1	4.00	36
PZ-111-VAS	627.44	21- 25	10/22/10	Benzene	15	1.00	1	200	1,900
PZ-111-VAS	627.44	21- 25	10/22/10	Benzidine	0 U	0.30	1	2.70	49
PZ-111-VAS	627.44	21- 25	10/22/10	Chlorobenzene	32	1.00	1	25	450
PZ-111-VAS	627.44	21- 25	10/22/10	cis-1,2-Dichloroethylene	57.00	1.00	1	620	11,000
PZ-111-VAS	627.44	21- 25	10/22/10	Dibutyl phthalate	0 U	5.00	1	9.70	75
PZ-111-VAS	627.44	21- 25	10/22/10	Dimethyl Phthalate	0 U	5.00	1	NA	NA
PZ-111-VAS	627.44	21- 25	10/22/10	Di-n-octyl Phthalate	0 U	5.00	1	NA	NA
PZ-111-VAS	627.44	21- 25	10/22/10	Dissolved Oxygen (DO) (mg/L)	0 U			NA	NA
PZ-111-VAS	627.44	21- 25	10/22/10	Ethylbenzene	0 U	1.00	1	18	320
PZ-111-VAS	627.44	21- 25	10/22/10	o-Chloroaniline	110 D	100	10	NA	NA
PZ-111-VAS	627.44	21- 25	10/22/10	Oxidation Reduction Potential (ORP) (mv)	-160			NA	NA
PZ-111-VAS	627.44	21- 25	10/22/10	p-Chloroaniline	0 U	10	1	NA	NA
PZ-111-VAS	627.44	21- 25	10/22/10	p-Cresol	40	10	1	25	450
PZ-111-VAS	627.44	21- 25	10/22/10	pH (SU)	7.09			NA	NA
PZ-111-VAS	627.44	21- 25	10/22/10	Specific Conductance (umhos/cm)	0.34			NA	NA
PZ-111-VAS	627.44	21- 25	10/22/10	Temperature (Degrees F)	54.32			NA	NA
PZ-111-VAS	627.44	21- 25	10/22/10	Tetrachloroethylene	0 U	1.00	1	190	2,900
PZ-111-VAS	627.44	21- 25	10/22/10	Toluene	2700 D	50	50	270	2,600
PZ-111-VAS	627.44	21- 25	10/22/10	Total Dissolved Solids (TDS) (mg/L)	280			NA	NA
PZ-111-VAS	627.44	21- 25	10/22/10	trans-1,2-Dichloroethylene	0 U	1.00	1	1,500	28,000
PZ-111-VAS	627.44	21- 25	10/22/10	Trichloroethylene	0 U	1.00	1	200	3,500

Location ID	Elev. (ft msl)	Depth (ft bgs)	Sample Date	Analyte	Result (in ppb unless otherwise noted)	RDL	Dilution	FCV	FAV
PZ-111-VAS	627.44	21- 25	10/22/10	Vinyl Chloride	5.70	1.00	1	930	17,000
PZ-111-VAS	627.44	21- 25	10/22/10	Xylenes (total)	0 U	3.00	1	41	730
PZ-111-VAS	621.44	27- 31	10/22/10	1,2-Dichlorobenzene	0 U	1.00	1	13	240
PZ-111-VAS	621.44	27- 31	10/22/10	1,2-Diphenylhydrazine	0 U	2.00	1	NA	NA
PZ-111-VAS	621.44	27- 31	10/22/10	3,3'-Dichlorobenzidine	0 U	0.30	1	4.50	81
PZ-111-VAS	621.44	27- 31	10/22/10	Aniline	0 U	4.00	1	4.00	36
PZ-111-VAS	621.44	27- 31	10/22/10	Benzene	2.70	1.00	1	200	1,900
PZ-111-VAS	621.44	27- 31	10/22/10	Benzidine	0 U	0.30	1	2.70	49
PZ-111-VAS	621.44	27- 31	10/22/10	Chlorobenzene	16	1.00	1	25	450
PZ-111-VAS	621.44	27- 31	10/22/10	cis-1,2-Dichloroethylene	26	1.00	1	620	11,000
PZ-111-VAS	621.44	27- 31	10/22/10	Dibutyl phthalate	0 U	5.00	1	9.70	75
PZ-111-VAS	621.44	27- 31	10/22/10	Dimethyl Phthalate	0 U	5.00	1	NA	NA
PZ-111-VAS	621.44	27- 31	10/22/10	Di-n-octyl Phthalate	0 U	5.00	1	NA	NA
PZ-111-VAS	621.44	27- 31	10/22/10	Dissolved Oxygen (DO) (mg/L)	0 U			NA	NA
PZ-111-VAS	621.44	27- 31	10/22/10	Ethylbenzene	0 U	1.00	1	18	320
PZ-111-VAS	621.44	27- 31	10/22/10	o-Chloroaniline	17	10	1	NA	NA
PZ-111-VAS	621.44	27- 31	10/22/10	Oxidation Reduction Potential (ORP) (mv)	-136			NA	NA
PZ-111-VAS	621.44	27- 31	10/22/10	p-Chloroaniline	0 U	10	1	NA	NA
PZ-111-VAS	621.44	27- 31	10/22/10	p-Cresol	0 U	10	1	25	450
PZ-111-VAS	621.44	27- 31	10/22/10	pH (SU)	6.39			NA	NA
PZ-111-VAS	621.44	27- 31	10/22/10	Specific Conductance (umhos/cm)	0.29			NA	NA
PZ-111-VAS	621.44	27- 31	10/22/10	Temperature (Degrees F)	53.78			NA	NA

Location ID	Elev. (ft msl)	Depth (ft bgs)	Sample Date	Analyte	Result (in ppb unless otherwise noted)	RDL	Dilution	FCV	FAV
PZ-111-VAS	621.44	27- 31	10/22/10	Tetrachloroethylene	0 U	1.00	1	190	2,900
PZ-111-VAS	621.44	27- 31	10/22/10	Toluene	1700 D	50	50	270	2,600
PZ-111-VAS	621.44	27- 31	10/22/10	Total Dissolved Solids (TDS) (mg/L)	200			NA	NA
PZ-111-VAS	621.44	27- 31	10/22/10	trans-1,2-Dichloroethylene	0 U	1.00	1	1,500	28,000
PZ-111-VAS	621.44	27- 31	10/22/10	Trichloroethylene	0 U	1.00	1	200	3,500
PZ-111-VAS	621.44	27- 31	10/22/10	Vinyl Chloride	3.50	1.00	1	930	17,000
PZ-111-VAS	621.44	27- 31	10/22/10	Xylenes (total)	0 U	3.00	1	41	730
PZ-111-VAS	613.44	35- 39	10/21/10	1,2-Dichlorobenzene	0 U	1.00	1	13	240
PZ-111-VAS	613.44	35- 39	10/21/10	1,2-Diphenylhydrazine	0 U	2.00	1	NA	NA
PZ-111-VAS	613.44	35- 39	10/21/10	3,3'-Dichlorobenzidine	0 U	0.30	1	4.50	81
PZ-111-VAS	613.44	35- 39	10/21/10	Aniline	0 U	4.00	1	4.00	36
PZ-111-VAS	613.44	35- 39	10/21/10	Benzene	0 U	1.00	1	200	1,900
PZ-111-VAS	613.44	35- 39	10/21/10	Benzidine	0 U	0.30	1	2.70	49
PZ-111-VAS	613.44	35- 39	10/21/10	Chlorobenzene	7.30	1.00	1	25	450
PZ-111-VAS	613.44	35- 39	10/21/10	cis-1,2-Dichloroethylene	10	1.00	1	620	11,000
PZ-111-VAS	613.44	35- 39	10/21/10	Dibutyl phthalate	0 U	5.00	1	9.70	75
PZ-111-VAS	613.44	35- 39	10/21/10	Dimethyl Phthalate	0 U	5.00	1	NA	NA
PZ-111-VAS	613.44	35- 39	10/21/10	Di-n-octyl Phthalate	0 U	5.00	1	NA	NA
PZ-111-VAS	613.44	35- 39	10/21/10	Dissolved Oxygen (DO) (mg/L)	0 U			NA	NA
PZ-111-VAS	613.44	35- 39	10/21/10	Ethylbenzene	0 U	1.00	1	18	320
PZ-111-VAS	613.44	35- 39	10/21/10	o-Chloroaniline	0 U	10	1	NA	NA
PZ-111-VAS	613.44	35- 39	10/21/10	Oxidation Reduction Potential (ORP) (mv)	-111			NA	NA

Location ID	Elev. (ft msl)	Depth (ft bgs)	Sample Date	Analyte	Result (in ppb unless otherwise noted)	RDL	Dilution	FCV	FAV
PZ-111-VAS	613.44	35- 39	10/21/10	p-Chloroaniline	0 U	10	1	NA	NA
PZ-111-VAS	613.44	35- 39	10/21/10	p-Cresol	0 U	10	1	25	450
PZ-111-VAS	613.44	35- 39	10/21/10	pH (SU)	7.28			NA	NA
PZ-111-VAS	613.44	35- 39	10/21/10	Specific Conductance (umhos/cm)	0.43			NA	NA
PZ-111-VAS	613.44	35- 39	10/21/10	Temperature (Degrees F)	57.38			NA	NA
PZ-111-VAS	613.44	35- 39	10/21/10	Tetrachloroethylene	0 U	1.00	1	190	2,900
PZ-111-VAS	613.44	35- 39	10/21/10	Toluene	770 D	10	10	270	2,600
PZ-111-VAS	613.44	35- 39	10/21/10	Total Dissolved Solids (TDS) (mg/L)	280			NA	NA
PZ-111-VAS	613.44	35- 39	10/21/10	trans-1,2-Dichloroethylene	0 U	1.00	1	1,500	28,000
PZ-111-VAS	613.44	35- 39	10/21/10	Trichloroethylene	0 U	1.00	1	200	3,500
PZ-111-VAS	613.44	35- 39	10/21/10	Vinyl Chloride	1.40	1.00	1	930	17,000
PZ-111-VAS	613.44	35- 39	10/21/10	Xylenes (total)	0 U	3.00	1	41	730
PZ-111-VAS	605.44	43- 47	10/21/10	1,2-Dichlorobenzene	0 U	1.00	1	13	240
PZ-111-VAS	605.44	43- 47	10/21/10	1,2-Diphenylhydrazine	0 U	2.00	1	NA	NA
PZ-111-VAS	605.44	43- 47	10/21/10	3,3'-Dichlorobenzidine	0 U	0.30	1	4.50	81
PZ-111-VAS	605.44	43- 47	10/21/10	Aniline	0 U	4.00	1	4.00	36
PZ-111-VAS	605.44	43- 47	10/21/10	Benzene	2.90	1.00	1	200	1,900
PZ-111-VAS	605.44	43- 47	10/21/10	Benzidine	0 U	0.30	1	2.70	49
PZ-111-VAS	605.44	43- 47	10/21/10	Chlorobenzene	24	1.00	1	25	450
PZ-111-VAS	605.44	43- 47	10/21/10	cis-1,2-Dichloroethylene	31	1.00	1	620	11,000
PZ-111-VAS	605.44	43- 47	10/21/10	Dibutyl phthalate	0 U	5.00	1	9.70	75
PZ-111-VAS	605.44	43- 47	10/21/10	Dimethyl Phthalate	0 U	5.00	1	NA	NA

Location ID	Elev. (ft msl)	Depth (ft bgs)	Sample Date	Analyte	Result (in ppb unless otherwise noted)	RDL	Dilution	FCV	FAV
PZ-111-VAS	605.44	43- 47	10/21/10	Di-n-octyl Phthalate	0 U	5.00	1	NA	NA
PZ-111-VAS	605.44	43- 47	10/21/10	Dissolved Oxygen (DO) (mg/L)	0 U			NA	NA
PZ-111-VAS	605.44	43- 47	10/21/10	Ethylbenzene	0 U	1.00	1	18	320
PZ-111-VAS	605.44	43- 47	10/21/10	o-Chloroaniline	19	10	1	NA	NA
PZ-111-VAS	605.44	43- 47	10/21/10	Oxidation Reduction Potential (ORP) (mv)	-182			NA	NA
PZ-111-VAS	605.44	43- 47	10/21/10	p-Chloroaniline	0 U	10	1	NA	NA
PZ-111-VAS	605.44	43- 47	10/21/10	p-Cresol	0 U	10	1	25	450
PZ-111-VAS	605.44	43- 47	10/21/10	pH (SU)	7.21			NA	NA
PZ-111-VAS	605.44	43- 47	10/21/10	Specific Conductance (umhos/cm)	0.43			NA	NA
PZ-111-VAS	605.44	43- 47	10/21/10	Temperature (Degrees F)	55.94			NA	NA
PZ-111-VAS	605.44	43- 47	10/21/10	Tetrachloroethylene	0 U	1.00	1	190	2,900
PZ-111-VAS	605.44	43- 47	10/21/10	Toluene	2100 D	50	50	270	2,600
PZ-111-VAS	605.44	43- 47	10/21/10	Total Dissolved Solids (TDS) (mg/L)	300			NA	NA
PZ-111-VAS	605.44	43- 47	10/21/10	trans-1,2-Dichloroethylene	0 U	1.00	1	1,500	28,000
PZ-111-VAS	605.44	43- 47	10/21/10	Trichloroethylene	0 U	1.00	1	200	3,500
PZ-111-VAS	605.44	43- 47	10/21/10	Turbidity (NTU)	354			NA	NA
PZ-111-VAS	605.44	43- 47	10/21/10	Vinyl Chloride	3.60	1.00	1	930	17,000
PZ-111-VAS	605.44	43- 47	10/21/10	Xylenes (total)	0 U	3.00	1	41	730
PZ-111-VAS	597.44	51- 55	10/21/10	1,2-Dichlorobenzene	0 UD	50	50	13	240
PZ-111-VAS	597.44	51- 55	10/21/10	1,2-Diphenylhydrazine	0 U	2.00	1	NA	NA
PZ-111-VAS	597.44	51- 55	10/21/10	3,3'-Dichlorobenzidine	0 U	0.30	1	4.50	81
PZ-111-VAS	597.44	51- 55	10/21/10	Aniline	0 U	4.00	1	4.00	36

Location ID	Elev. (ft msl)	Depth (ft bgs)	Sample Date	Analyte	Result (in ppb unless otherwise noted)	RDL	Dilution	FCV	FAV
PZ-111-VAS	597.44	51- 55	10/21/10	Benzene	0 UD	50	50	200	1,900
PZ-111-VAS	597.44	51- 55	10/21/10	Benzidine	0 U	0.30	1	2.70	49
PZ-111-VAS	597.44	51- 55	10/21/10	Chlorobenzene	1300 D	50	50	25	450
PZ-111-VAS	597.44	51- 55	10/21/10	cis-1,2-Dichloroethylene	1700 D	50	50	620	11,000
PZ-111-VAS	597.44	51- 55	10/21/10	Dibutyl phthalate	0 U	5.00	1	9.70	75
PZ-111-VAS	597.44	51- 55	10/21/10	Dimethyl Phthalate	0 U	5.00	1	NA	NA
PZ-111-VAS	597.44	51- 55	10/21/10	Di-n-octyl Phthalate	0 U	5.00	1	NA	NA
PZ-111-VAS	597.44	51- 55	10/21/10	Dissolved Oxygen (DO) (mg/L)	0 U			NA	NA
PZ-111-VAS	597.44	51- 55	10/21/10	Ethylbenzene	0 UD	50	50	18	320
PZ-111-VAS	597.44	51- 55	10/21/10	o-Chloroaniline	110 JD	50	5	NA	NA
PZ-111-VAS	597.44	51- 55	10/21/10	Oxidation Reduction Potential (ORP) (mv)	-167			NA	NA
PZ-111-VAS	597.44	51- 55	10/21/10	p-Chloroaniline	220 J	10	1	NA	NA
PZ-111-VAS	597.44	51- 55	10/21/10	p-Cresol	74 D	50	5	25	450
PZ-111-VAS	597.44	51- 55	10/21/10	pH (SU)	6.65			NA	NA
PZ-111-VAS	597.44	51- 55	10/21/10	Specific Conductance (umhos/cm)	0.66			NA	NA
PZ-111-VAS	597.44	51- 55	10/21/10	Temperature (Degrees F)	57.56			NA	NA
PZ-111-VAS	597.44	51- 55	10/21/10	Tetrachloroethylene	0 UD	50	50	190	2,900
PZ-111-VAS	597.44	51- 55	10/21/10	Toluene	190000 D	2500	2500	270	2,600
PZ-111-VAS	597.44	51- 55	10/21/10	Total Dissolved Solids (TDS) (mg/L)	430			NA	NA
PZ-111-VAS	597.44	51- 55	10/21/10	trans-1,2-Dichloroethylene	0 UD	50	50	1,500	28,000
PZ-111-VAS	597.44	51- 55	10/21/10	Trichloroethylene	0 UD	50	50	200	3,500
PZ-111-VAS	597.44	51- 55	10/21/10	Turbidity (NTU)	208			NA	NA

Location ID	Elev. (ft msl)	Depth (ft bgs)	Sample Date	Analyte	Result (in ppb unless otherwise noted)	RDL	Dilution	FCV	FAV
PZ-111-VAS	597.44	51- 55	10/21/10	Vinyl Chloride	190 D	50	50	930	17,000
PZ-111-VAS	597.44	51- 55	10/21/10	Xylenes (total)	0 UD	150	50	41	730
PZ-111-VAS	589.44	59- 63	10/21/10	1,2-Dichlorobenzene	0 U	1.00	1	13	240
PZ-111-VAS	589.44	59- 63	10/21/10	1,2-Diphenylhydrazine	0 U	2.00	1	NA	NA
PZ-111-VAS	589.44	59- 63	10/21/10	3,3'-Dichlorobenzidine	0 U	0.30	1	4.50	81
PZ-111-VAS	589.44	59- 63	10/21/10	Aniline	0 U	4.00	1	4.00	36
PZ-111-VAS	589.44	59- 63	10/21/10	Benzene	5.40	1.00	1	200	1,900
PZ-111-VAS	589.44	59- 63	10/21/10	Benzidine	0 U	0.30	1	2.70	49
PZ-111-VAS	589.44	59- 63	10/21/10	Chlorobenzene	110	1.00	1	25	450
PZ-111-VAS	589.44	59- 63	10/21/10	cis-1,2-Dichloroethylene	57.00	1.00	1	620	11,000
PZ-111-VAS	589.44	59- 63	10/21/10	Dibutyl phthalate	0 U	5.00	1	9.70	75
PZ-111-VAS	589.44	59- 63	10/21/10	Dimethyl Phthalate	0 U	5.00	1	NA	NA
PZ-111-VAS	589.44	59- 63	10/21/10	Di-n-octyl Phthalate	0 U	5.00	1	NA	NA
PZ-111-VAS	589.44	59- 63	10/21/10	Dissolved Oxygen (DO) (mg/L)	0 U			NA	NA
PZ-111-VAS	589.44	59- 63	10/21/10	Ethylbenzene	1.40	1.00	1	18	320
PZ-111-VAS	589.44	59- 63	10/21/10	o-Chloroaniline	71 D	50	5	NA	NA
PZ-111-VAS	589.44	59- 63	10/21/10	Oxidation Reduction Potential (ORP) (mv)	-227			NA	NA
PZ-111-VAS	589.44	59- 63	10/21/10	p-Chloroaniline	0 U	10	1	NA	NA
PZ-111-VAS	589.44	59- 63	10/21/10	p-Cresol	0 U	10	1	25	450
PZ-111-VAS	589.44	59- 63	10/21/10	pH (SU)	7.34			NA	NA
PZ-111-VAS	589.44	59- 63	10/21/10	Specific Conductance (umhos/cm)	0.45			NA	NA
PZ-111-VAS	589.44	59- 63	10/21/10	Temperature (Degrees F)	54.32			NA	NA

Location ID	Elev. (ft msl)	Depth (ft bgs)	Sample Date	Analyte	Result (in ppb unless otherwise noted)	RDL	Dilution	FCV	FAV
PZ-111-VAS	589.44	59- 63	10/21/10	Tetrachloroethylene	0 U	1.00	1	190	2,900
PZ-111-VAS	589.44	59- 63	10/21/10	Toluene	4300 D	50	50	270	2,600
PZ-111-VAS	589.44	59- 63	10/21/10	Total Dissolved Solids (TDS) (mg/L)	300			NA	NA
PZ-111-VAS	589.44	59- 63	10/21/10	trans-1,2-Dichloroethylene	0 U	1.00	1	1,500	28,000
PZ-111-VAS	589.44	59- 63	10/21/10	Trichloroethylene	1.40	1.00	1	200	3,500
PZ-111-VAS	589.44	59- 63	10/21/10	Vinyl Chloride	11	1.00	1	930	17,000
PZ-111-VAS	589.44	59- 63	10/21/10	Xylenes (total)	0 U	3.00	1	41	730
PZ-111-VAS	581.44	67- 71	10/21/10	1,2-Dichlorobenzene	0 U	1.00	1	13	240
PZ-111-VAS	581.44	67- 71	10/21/10	1,2-Diphenylhydrazine	0 U	2.00	1	NA	NA
PZ-111-VAS	581.44	67- 71	10/21/10	3,3'-Dichlorobenzidine	0 U	0.30	1	4.50	81
PZ-111-VAS	581.44	67- 71	10/21/10	Aniline	0 U	4.00	1	4.00	36
PZ-111-VAS	581.44	67- 71	10/21/10	Benzene	6.10	1.00	1	200	1,900
PZ-111-VAS	581.44	67- 71	10/21/10	Benzidine	0 U	0.30	1	2.70	49
PZ-111-VAS	581.44	67- 71	10/21/10	Chlorobenzene	1.50	1.00	1	25	450
PZ-111-VAS	581.44	67- 71	10/21/10	cis-1,2-Dichloroethylene	3.70	1.00	1	620	11,000
PZ-111-VAS	581.44	67- 71	10/21/10	Dibutyl phthalate	0 U	5.00	1	9.70	75
PZ-111-VAS	581.44	67- 71	10/21/10	Dimethyl Phthalate	0 U	5.00	1	NA	NA
PZ-111-VAS	581.44	67- 71	10/21/10	Di-n-octyl Phthalate	0 U	5.00	1	NA	NA
PZ-111-VAS	581.44	67- 71	10/21/10	Dissolved Oxygen (DO) (mg/L)	0 U			NA	NA
PZ-111-VAS	581.44	67- 71	10/21/10	Ethylbenzene	0 U	1.00	1	18	320
PZ-111-VAS	581.44	67- 71	10/21/10	o-Chloroaniline	100	50	1	NA	NA
PZ-111-VAS	581.44	67- 71	10/21/10	Oxidation Reduction Potential (ORP) (mv)	-235			NA	NA

Location ID	Elev. (ft msl)	Depth (ft bgs)	Sample Date	Analyte	Result (in ppb unless otherwise noted)	RDL	Dilution	FCV	FAV
PZ-111-VAS	581.44	67- 71	10/21/10	p-Chloroaniline	0 U	10	1	NA	NA
PZ-111-VAS	581.44	67- 71	10/21/10	p-Cresol	0 UR	10	1	25	450
PZ-111-VAS	581.44	67- 71	10/21/10	pH (SU)	7.41			NA	NA
PZ-111-VAS	581.44	67- 71	10/21/10	Specific Conductance (umhos/cm)	0.34			NA	NA
PZ-111-VAS	581.44	67- 71	10/21/10	Temperature (Degrees F)	53.78			NA	NA
PZ-111-VAS	581.44	67- 71	10/21/10	Tetrachloroethylene	0 U	1.00	1	190	2,900
PZ-111-VAS	581.44	67- 71	10/21/10	Toluene	140	1.00	1	270	2,600
PZ-111-VAS	581.44	67- 71	10/21/10	Total Dissolved Solids (TDS) (mg/L)	230			NA	NA
PZ-111-VAS	581.44	67- 71	10/21/10	trans-1,2-Dichloroethylene	0 U	1.00	1	1,500	28,000
PZ-111-VAS	581.44	67- 71	10/21/10	Trichloroethylene	0 U	1.00	1	200	3,500
PZ-111-VAS	581.44	67- 71	10/21/10	Vinyl Chloride	2.50	1.00	1	930	17,000
PZ-111-VAS	581.44	67- 71	10/21/10	Xylenes (total)	0 U	3.00	1	41	730
PZ-111-VAS	573.44	75- 79	10/21/10	1,2-Dichlorobenzene	0 U	1.00	1	13	240
PZ-111-VAS	573.44	75- 79	10/21/10	1,2-Diphenylhydrazine	0 U	2.00	1	NA	NA
PZ-111-VAS	573.44	75- 79	10/21/10	3,3'-Dichlorobenzidine	0 U	0.30	1	4.50	81
PZ-111-VAS	573.44	75- 79	10/21/10	Aniline	0 U	4.00	1	4.00	36
PZ-111-VAS	573.44	75- 79	10/21/10	Benzene	14	1.00	1	200	1,900
PZ-111-VAS	573.44	75- 79	10/21/10	Benzidine	0 U	0.30	1	2.70	49
PZ-111-VAS	573.44	75- 79	10/21/10	Chlorobenzene	2.70	1.00	1	25	450
PZ-111-VAS	573.44	75- 79	10/21/10	cis-1,2-Dichloroethylene	6.80	1.00	1	620	11,000
PZ-111-VAS	573.44	75- 79	10/21/10	Dibutyl phthalate	0 U	5.00	1	9.70	75
PZ-111-VAS	573.44	75- 79	10/21/10	Dimethyl Phthalate	0 U	5.00	1	NA	NA

Location ID	Elev. (ft msl)	Depth (ft bgs)	Sample Date	Analyte	Result (in ppb unless otherwise noted)	RDL	Dilution	FCV	FAV
PZ-111-VAS	573.44	75- 79	10/21/10	Di-n-octyl Phthalate	0 U	5.00	1	NA	NA
PZ-111-VAS	573.44	75- 79	10/21/10	Dissolved Oxygen (DO) (mg/L)	0 U			NA	NA
PZ-111-VAS	573.44	75- 79	10/21/10	Ethylbenzene	0 U	1.00	1	18	320
PZ-111-VAS	573.44	75- 79	10/21/10	o-Chloroaniline	120 D	100	10	NA	NA
PZ-111-VAS	573.44	75- 79	10/21/10	Oxidation Reduction Potential (ORP) (mv)	-242			NA	NA
PZ-111-VAS	573.44	75- 79	10/21/10	p-Chloroaniline	0 U	10	1	NA	NA
PZ-111-VAS	573.44	75- 79	10/21/10	p-Cresol	0 U	10	1	25	450
PZ-111-VAS	573.44	75- 79	10/21/10	pH (SU)	7.40			NA	NA
PZ-111-VAS	573.44	75- 79	10/21/10	Specific Conductance (umhos/cm)	0.26			NA	NA
PZ-111-VAS	573.44	75- 79	10/21/10	Temperature (Degrees F)	54.86			NA	NA
PZ-111-VAS	573.44	75- 79	10/21/10	Tetrachloroethylene	0 U	1.00	1	190	2,900
PZ-111-VAS	573.44	75- 79	10/21/10	Toluene	260 D	5.00	5	270	2,600
PZ-111-VAS	573.44	75- 79	10/21/10	Total Dissolved Solids (TDS) (mg/L)	170			NA	NA
PZ-111-VAS	573.44	75- 79	10/21/10	trans-1,2-Dichloroethylene	0 U	1.00	1	1,500	28,000
PZ-111-VAS	573.44	75- 79	10/21/10	Trichloroethylene	0 U	1.00	1	200	3,500
PZ-111-VAS	573.44	75- 79	10/21/10	Vinyl Chloride	1.90	1.00	1	930	17,000
PZ-111-VAS	573.44	75- 79	10/21/10	Xylenes (total)	0 U	3.00	1	41	730
PZ-111-VAS	565.44	83- 87	10/21/10	1,2-Dichlorobenzene	0 U	1.00	1	13	240
PZ-111-VAS	565.44	83- 87	10/21/10	1,2-Diphenylhydrazine	0 U	2.00	1	NA	NA
PZ-111-VAS	565.44	83- 87	10/21/10	3,3'-Dichlorobenzidine	0 U	0.30	1	4.50	81
PZ-111-VAS	565.44	83- 87	10/21/10	Aniline	0 U	4.00	1	4.00	36
PZ-111-VAS	565.44	83- 87	10/21/10	Benzene	14	1.00	1	200	1,900

Location ID	Elev. (ft msl)	Depth (ft bgs)	Sample Date	Analyte	Result (in ppb unless otherwise noted)	RDL	Dilution	FCV	FAV
PZ-111-VAS	565.44	83- 87	10/21/10	Benzidine	0 U	0.30	1	2.70	49
PZ-111-VAS	565.44	83- 87	10/21/10	Chlorobenzene	0 U	1.00	1	25	450
PZ-111-VAS	565.44	83- 87	10/21/10	cis-1,2-Dichloroethylene	2.40	1.00	1	620	11,000
PZ-111-VAS	565.44	83- 87	10/21/10	Dibutyl phthalate	0 U	5.00	1	9.70	75
PZ-111-VAS	565.44	83- 87	10/21/10	Dimethyl Phthalate	0 U	5.00	1	NA	NA
PZ-111-VAS	565.44	83- 87	10/21/10	Di-n-octyl Phthalate	0 U	5.00	1	NA	NA
PZ-111-VAS	565.44	83- 87	10/21/10	Dissolved Oxygen (DO) (mg/L)	0 U			NA	NA
PZ-111-VAS	565.44	83- 87	10/21/10	Ethylbenzene	0 U	1.00	1	18	320
PZ-111-VAS	565.44	83- 87	10/21/10	o-Chloroaniline	73 D	50	5	NA	NA
PZ-111-VAS	565.44	83- 87	10/21/10	Oxidation Reduction Potential (ORP) (mv)	-231			NA	NA
PZ-111-VAS	565.44	83- 87	10/21/10	p-Chloroaniline	0 U	10	1	NA	NA
PZ-111-VAS	565.44	83- 87	10/21/10	p-Cresol	0 UJ	10	1	25	450
PZ-111-VAS	565.44	83- 87	10/21/10	pH (SU)	7.40			NA	NA
PZ-111-VAS	565.44	83- 87	10/21/10	Specific Conductance (umhos/cm)	0.18			NA	NA
PZ-111-VAS	565.44	83- 87	10/21/10	Temperature (Degrees F)	54.32			NA	NA
PZ-111-VAS	565.44	83- 87	10/21/10	Tetrachloroethylene	0 U	1.00	1	190	2,900
PZ-111-VAS	565.44	83- 87	10/21/10	Toluene	110	1.00	1	270	2,600
PZ-111-VAS	565.44	83- 87	10/21/10	Total Dissolved Solids (TDS) (mg/L)	110			NA	NA
PZ-111-VAS	565.44	83- 87	10/21/10	trans-1,2-Dichloroethylene	0 U	1.00	1	1,500	28,000
PZ-111-VAS	565.44	83- 87	10/21/10	Trichloroethylene	0 U	1.00	1	200	3,500
PZ-111-VAS	565.44	83- 87	10/21/10	Vinyl Chloride	0 U	1.00	1	930	17,000
PZ-111-VAS	565.44	83- 87	10/21/10	Xylenes (total)	0 U	3.00	1	41	730

Location ID	Elev. (ft msl)	Depth (ft bgs)	Sample Date	Analyte	Result (in ppb unless otherwise noted)	RDL	Dilution	FCV	FAV
PZ-111-VAS	557.44	91- 95	10/21/10	1,2-Dichlorobenzene	0 U	1.00	1	13	240
PZ-111-VAS	557.44	91- 95	10/21/10	1,2-Diphenylhydrazine	0 U	2.00	1	NA	NA
PZ-111-VAS	557.44	91- 95	10/21/10	3,3`-Dichlorobenzidine	0 U	0.30	1	4.50	81
PZ-111-VAS	557.44	91- 95	10/21/10	Aniline	0 U	4.00	1	4.00	36
PZ-111-VAS	557.44	91- 95	10/21/10	Benzene	7.20	1.00	1	200	1,900
PZ-111-VAS	557.44	91- 95	10/21/10	Benzidine	0 U	0.30	1	2.70	49
PZ-111-VAS	557.44	91- 95	10/21/10	Chlorobenzene	1.60	1.00	1	25	450
PZ-111-VAS	557.44	91- 95	10/21/10	cis-1,2-Dichloroethylene	5.10	1.00	1	620	11,000
PZ-111-VAS	557.44	91- 95	10/21/10	Dibutyl phthalate	0 U	5.00	1	9.70	75
PZ-111-VAS	557.44	91- 95	10/21/10	Dimethyl Phthalate	0 U	5.00	1	NA	NA
PZ-111-VAS	557.44	91- 95	10/21/10	Di-n-octyl Phthalate	0 U	5.00	1	NA	NA
PZ-111-VAS	557.44	91- 95	10/21/10	Dissolved Oxygen (DO) (mg/L)	0 U			NA	NA
PZ-111-VAS	557.44	91- 95	10/21/10	Ethylbenzene	0 U	1.00	1	18	320
PZ-111-VAS	557.44	91- 95	10/21/10	o-Chloroaniline	180 D	100	10	NA	NA
PZ-111-VAS	557.44	91- 95	10/21/10	Oxidation Reduction Potential (ORP) (mv)	-211			NA	NA
PZ-111-VAS	557.44	91- 95	10/21/10	p-Chloroaniline	0 U	10	1	NA	NA
PZ-111-VAS	557.44	91- 95	10/21/10	p-Cresol	0 U	10	1	25	450
PZ-111-VAS	557.44	91- 95	10/21/10	pH (SU)	7.34			NA	NA
PZ-111-VAS	557.44	91- 95	10/21/10	Specific Conductance (umhos/cm)	0.18			NA	NA
PZ-111-VAS	557.44	91- 95	10/21/10	Temperature (Degrees F)	54.50			NA	NA
PZ-111-VAS	557.44	91- 95	10/21/10	Tetrachloroethylene	0 U	1.00	1	190	2,900
PZ-111-VAS	557.44	91- 95	10/21/10	Toluene	170	1.00	1	270	2,600
PZ-111-VAS	557.44	91- 95	10/21/10	Total Dissolved Solids (TDS) (mg/L)	120			NA	NA

Location ID	Elev. (ft msl)	Depth (ft bgs)	Sample Date	Analyte	Result (in ppb unless otherwise noted)	RDL	Dilution	FCV	FAV
PZ-111-VAS	557.44	91- 95	10/21/10	trans-1,2-Dichloroethylene	0 U	1.00	1	1,500	28,000
PZ-111-VAS	557.44	91- 95	10/21/10	Trichloroethylene	0 U	1.00	1	200	3,500
PZ-111-VAS	557.44	91- 95	10/21/10	Vinyl Chloride	2.00	1.00	1	930	17,000
PZ-111-VAS	557.44	91- 95	10/21/10	Xylenes (total)	0 U	3.00	1	41	730
PZ-111-VAS	549.44	99- 103	10/21/10	1,2-Dichlorobenzene	0 U	1.00	1	13	240
PZ-111-VAS	549.44	99- 103	10/21/10	1,2-Diphenylhydrazine	0 U	2.00	1	NA	NA
PZ-111-VAS	549.44	99- 103	10/21/10	3,3'-Dichlorobenzidine	0 U	0.30	1	4.50	81
PZ-111-VAS	549.44	99- 103	10/21/10	Aniline	0 U	4.00	1	4.00	36
PZ-111-VAS	549.44	99- 103	10/21/10	Benzene	15	1.00	1	200	1,900
PZ-111-VAS	549.44	99- 103	10/21/10	Benzidine	0 U	0.30	1	2.70	49
PZ-111-VAS	549.44	99- 103	10/21/10	Chlorobenzene	5.00	1.00	1	25	450
PZ-111-VAS	549.44	99- 103	10/21/10	cis-1,2-Dichloroethylene	15	1.00	1	620	11,000
PZ-111-VAS	549.44	99- 103	10/21/10	Dibutyl phthalate	0 U	5.00	1	9.70	75
PZ-111-VAS	549.44	99- 103	10/21/10	Dimethyl Phthalate	0 U	5.00	1	NA	NA
PZ-111-VAS	549.44	99- 103	10/21/10	Di-n-octyl Phthalate	0 U	5.00	1	NA	NA
PZ-111-VAS	549.44	99- 103	10/21/10	Dissolved Oxygen (DO) (mg/L)	0 U			NA	NA
PZ-111-VAS	549.44	99- 103	10/21/10	Ethylbenzene	0 U	1.00	1	18	320
PZ-111-VAS	549.44	99- 103	10/21/10	o-Chloroaniline	600 D	500	50	NA	NA
PZ-111-VAS	549.44	99- 103	10/21/10	Oxidation Reduction Potential (ORP) (mv)	-136			NA	NA
PZ-111-VAS	549.44	99- 103	10/21/10	p-Chloroaniline	0 U	10	1	NA	NA
PZ-111-VAS	549.44	99- 103	10/21/10	p-Cresol	0 U	10	1	25	450
PZ-111-VAS	549.44	99- 103	10/21/10	pH (SU)	6.83			NA	NA

Location ID	Elev. (ft msl)	Depth (ft bgs)	Sample Date	Analyte	Result (in ppb unless otherwise noted)	RDL	Dilution	FCV	FAV
PZ-111-VAS	549.44	99- 103	10/21/10	Specific Conductance (umhos/cm)	0.22			NA	NA
PZ-111-VAS	549.44	99- 103	10/21/10	Temperature (Degrees F)	54.32			NA	NA
PZ-111-VAS	549.44	99- 103	10/21/10	Tetrachloroethylene	0 U	1.00	1	190	2,900
PZ-111-VAS	549.44	99- 103	10/21/10	Toluene	500 D	10	10	270	2,600
PZ-111-VAS	549.44	99- 103	10/21/10	Total Dissolved Solids (TDS) (mg/L)	140			NA	NA
PZ-111-VAS	549.44	99- 103	10/21/10	trans-1,2-Dichloroethylene	0 U	1.00	1	1,500	28,000
PZ-111-VAS	549.44	99- 103	10/21/10	Trichloroethylene	0 U	1.00	1	200	3,500
PZ-111-VAS	549.44	99- 103	10/21/10	Turbidity (NTU)	312			NA	NA
PZ-111-VAS	549.44	99- 103	10/21/10	Vinyl Chloride	6.90	1.00	1	930	17,000
PZ-111-VAS	549.44	99- 103	10/21/10	Xylenes (total)	0 U	3.00	1	41	730
PZ-112A	620.76	30 - 35	10/5/10	1,2-Dichlorobenzene	0 U	1.00	1	13	240
PZ-112A	620.76	30 - 35	10/5/10	1,2-Diphenylhydrazine	0 U	2.00	1	NA	NA
PZ-112A	620.76	30 - 35	10/5/10	3,3`-Dichlorobenzidine	0 U	0.30	1	4.50	81
PZ-112A	620.76	30 - 35	10/5/10	Aniline	0 U	4.00	1	4.00	36
PZ-112A	620.76	30 - 35	10/5/10	Benzene	0 U	1.00	1	200	1,900
PZ-112A	620.76	30 - 35	10/5/10	Benzidine	0 U	0.30	1	2.70	49
PZ-112A	620.76	30 - 35	10/5/10	Chlorobenzene	0 U	1.00	1	25	450
PZ-112A	620.76	30 - 35	10/5/10	cis-1,2-Dichloroethylene	0 U	1.00	1	620	11,000
PZ-112A	620.76	30 - 35	10/5/10	Dibutyl phthalate	0 U	5.00	1	9.70	75
PZ-112A	620.76	30 - 35	10/5/10	Dimethyl Phthalate	0 U	5.00	1	NA	NA
PZ-112A	620.76	30 - 35	10/5/10	Di-n-octyl Phthalate	0 U	5.00	1	NA	NA
PZ-112A	620.76	30 - 35	10/5/10	Dissolved Oxygen (DO) (mg/L)	7.29			NA	NA
PZ-112A	620.76	30 - 35	10/5/10	Ethylbenzene	0 U	1.00	1	18	320

Location ID	Elev. (ft msl)	Depth (ft bgs)	Sample Date	Analyte	Result (in ppb unless otherwise noted)	RDL	Dilution	FCV	FAV
PZ-112A	620.76	30 - 35	10/5/10	o-Chloroaniline	0 U	10	1	NA	NA
PZ-112A	620.76	30 - 35	10/5/10	Oxidation Reduction Potential (ORP) (mv)	0 U			NA	NA
PZ-112A	620.76	30 - 35	10/5/10	p-Chloroaniline	0 U	10	1	NA	NA
PZ-112A	620.76	30 - 35	10/5/10	p-Cresol	0 U	10	1	25	450
PZ-112A	620.76	30 - 35	10/5/10	pH (SU)	7.33			NA	NA
PZ-112A	620.76	30 - 35	10/5/10	Specific Conductance (umhos/cm)	0.57			NA	NA
PZ-112A	620.76	30 - 35	10/5/10	Temperature (Degrees F)	60.08			NA	NA
PZ-112A	620.76	30 - 35	10/5/10	Tetrachloroethylene	0 U	1.00	1	190	2,900
PZ-112A	620.76	30 - 35	10/5/10	Toluene	0 U	1.00	1	270	2,600
PZ-112A	620.76	30 - 35	10/5/10	Total Dissolved Solids (TDS) (mg/L)	310			NA	NA
PZ-112A	620.76	30 - 35	10/5/10	trans-1,2-Dichloroethylene	0 U	1.00	1	1,500	28,000
PZ-112A	620.76	30 - 35	10/5/10	Trichloroethylene	0 U	1.00	1	200	3,500
PZ-112A	620.76	30 - 35	10/5/10	Turbidity (NTU)	28			NA	NA
PZ-112A	620.76	30 - 35	10/5/10	Vinyl Chloride	0 U	1.00	1	930	17,000
PZ-112A	620.76	30 - 35	10/5/10	Xylenes (total)	0 U	3.00	1	41	730
PZ-112B	566.87	83.5 - 88.5	10/5/10	1,2-Dichlorobenzene	0 U	1.00	1	13	240
PZ-112B	566.87	83.5 - 88.5	10/5/10	1,2-Diphenylhydrazine	0 U	2.00	1	NA	NA
PZ-112B	566.87	83.5 - 88.5	10/5/10	3,3'-Dichlorobenzidine	0 U	0.30	1	4.50	81
PZ-112B	566.87	83.5 - 88.5	10/5/10	Aniline	0 U	4.00	1	4.00	36
PZ-112B	566.87	83.5 - 88.5	10/5/10	Benzene	23	1.00	1	200	1,900
PZ-112B	566.87	83.5 - 88.5	10/5/10	Benzidine	0 U	0.30	1	2.70	49
PZ-112B	566.87	83.5 - 88.5	10/5/10	Chlorobenzene	0 U	1.00	1	25	450
PZ-112B	566.87	83.5 - 88.5	10/5/10	cis-1,2-Dichloroethylene	0 U	1.00	1	620	11,000

Location ID	Elev. (ft msl)	Depth (ft bgs)	Sample Date	Analyte	Result (in ppb unless otherwise noted)	RDL	Dilution	FCV	FAV
PZ-112B	566.87	83.5 - 88.5	10/5/10	Dibutyl phthalate	0 U	5.00	1	9.70	75
PZ-112B	566.87	83.5 - 88.5	10/5/10	Dimethyl Phthalate	0 U	5.00	1	NA	NA
PZ-112B	566.87	83.5 - 88.5	10/5/10	Di-n-octyl Phthalate	0 U	5.00	1	NA	NA
PZ-112B	566.87	83.5 - 88.5	10/5/10	Dissolved Oxygen (DO) (mg/L)	0.02			NA	NA
PZ-112B	566.87	83.5 - 88.5	10/5/10	Ethylbenzene	0 U	1.00	1	18	320
PZ-112B	566.87	83.5 - 88.5	10/5/10	o-Chloroaniline	89	50	5	NA	NA
PZ-112B	566.87	83.5 - 88.5	10/5/10	Oxidation Reduction Potential (ORP) (mv)	-219			NA	NA
PZ-112B	566.87	83.5 - 88.5	10/5/10	p-Chloroaniline	0 U	10	1	NA	NA
PZ-112B	566.87	83.5 - 88.5	10/5/10	p-Cresol	0 U	10	1	25	450
PZ-112B	566.87	83.5 - 88.5	10/5/10	pH (SU)	7.54			NA	NA
PZ-112B	566.87	83.5 - 88.5	10/5/10	Specific Conductance (umhos/cm)	0.24			NA	NA
PZ-112B	566.87	83.5 - 88.5	10/5/10	Temperature (Degrees F)	62.06			NA	NA
PZ-112B	566.87	83.5 - 88.5	10/5/10	Tetrachloroethylene	0 U	1.00	1	190	2,900
PZ-112B	566.87	83.5 - 88.5	10/5/10	Toluene	0 U	1.00	1	270	2,600
PZ-112B	566.87	83.5 - 88.5	10/5/10	Total Dissolved Solids (TDS) (mg/L)	160			NA	NA
PZ-112B	566.87	83.5 - 88.5	10/5/10	trans-1,2-Dichloroethylene	0 U	1.00	1	1,500	28,000
PZ-112B	566.87	83.5 - 88.5	10/5/10	Trichloroethylene	0 U	1.00	1	200	3,500
PZ-112B	566.87	83.5 - 88.5	10/5/10	Turbidity (NTU)	68.00			NA	NA
PZ-112B	566.87	83.5 - 88.5	10/5/10	Vinyl Chloride	0 U	1.00	1	930	17,000
PZ-112B	566.87	83.5 - 88.5	10/5/10	Xylenes (total)	0 U	3.00	1	41	730
PZ-113A	599.94	50 - 55	10/5/10	1,2-Dichlorobenzene	0 U	1.00	1	13	240
PZ-113A	599.94	50 - 55	10/5/10	1,2-Diphenylhydrazine	0 U	2.00	1	NA	NA
PZ-113A	599.94	50 - 55	10/5/10	3,3'-Dichlorobenzidine	0 U	0.30	1		

Location ID	Elev. (ft msl)	Depth (ft bgs)	Sample Date	Analyte	Result (in ppb unless otherwise noted)	RDL	Dilution	FCV	FAV
								4.50	81
PZ-113A	599.94	50 - 55	10/5/10	Aniline	0 U	4.00	1	4.00	36
PZ-113A	599.94	50 - 55	10/5/10	Benzene	1.70	1.00	1	200	1,900
PZ-113A	599.94	50 - 55	10/5/10	Benzidine	0 U	0.30	1	2.70	49
PZ-113A	599.94	50 - 55	10/5/10	Bromide (mg/L)	0 U	0.36	5	NA	NA
PZ-113A	599.94	50 - 55	10/5/10	Chloride (mg/L)	98	10	25	NA	NA
PZ-113A	599.94	50 - 55	10/5/10	Chlorobenzene	900	50	50	25	450
PZ-113A	599.94	50 - 55	10/5/10	cis-1,2-Dichloroethylene	0 U	1.00	1	620	11,000
PZ-113A	599.94	50 - 55	10/5/10	Dibutyl phthalate	0 U	5.00	1	9.70	75
PZ-113A	599.94	50 - 55	10/5/10	Dimethyl Phthalate	0 U	5.00	1	NA	NA
PZ-113A	599.94	50 - 55	10/5/10	Di-n-octyl Phthalate	0 U	5.00	1	NA	NA
PZ-113A	599.94	50 - 55	10/5/10	Dissolved Oxygen (DO) (mg/L)	0 U			NA	NA
PZ-113A	599.94	50 - 55	10/5/10	Ethylbenzene	6.30	1.00	1	18	320
PZ-113A	599.94	50 - 55	10/5/10	Fluoride	0 U	100	5	2,700	20,000
PZ-113A	599.94	50 - 55	10/5/10	Iron	1,800	200	1	NA	NA
PZ-113A	599.94	50 - 55	10/5/10	Iron, Ferric	0 U	200	1	NA	NA
PZ-113A	599.94	50 - 55	10/5/10	Iron, Ferrous	1,700	20	1	NA	NA
PZ-113A	599.94	50 - 55	10/5/10	Manganese	200	50	1	Hardness dependent	
PZ-113A	599.94	50 - 55	10/5/10	Methane	11,000	500	500	NA	NA
PZ-113A	599.94	50 - 55	10/5/10	Nitrate (as N)	0 U	100	5	NA	NA
PZ-113A	599.94	50 - 55	10/5/10	Nitrite (as N)	0 U	100	5	NA	NA
PZ-113A	599.94	50 - 55	10/5/10	o-Chloroaniline	21	10	1	NA	NA
PZ-113A	599.94	50 - 55	10/5/10	Orthophosphate (mg/L)	0.05	0.01	1	NA	NA
PZ-113A	599.94	50 - 55	10/5/10	Oxidation Reduction Potential (ORP) (mv)	-206			NA	NA
PZ-113A	599.94	50 - 55	10/5/10	p-Chloroaniline	0 U	10	1	NA	NA
PZ-113A	599.94	50 - 55	10/5/10	p-Cresol	11	10	1	25	450
PZ-113A	599.94	50 - 55	10/5/10	pH (SU)	7.27			NA	NA
PZ-113A	599.94	50 - 55	10/5/10	Potassium	1,700	1000	1	NA	NA

Location ID	Elev. (ft msl)	Depth (ft bgs)	Sample Date	Analyte	Result (in ppb unless otherwise noted)	RDL	Dilution	FCV	FAV
PZ-113A	599.94	50 - 55	10/5/10	Sodium	110,000	1000	1	NA	NA
PZ-113A	599.94	50 - 55	10/5/10	Specific Conductance (umhos/cm)	0.91			NA	NA
PZ-113A	599.94	50 - 55	10/5/10	Sulfide (mg/L)	0 U	1.00	1	NA	NA
PZ-113A	599.94	50 - 55	10/5/10	Temperature (Degrees F)	61.16			NA	NA
PZ-113A	599.94	50 - 55	10/5/10	Tetrachloroethylene	0 U	1.00	1	190	2,900
PZ-113A	599.94	50 - 55	10/5/10	Toluene	10,000	50	50	270	2,600
PZ-113A	599.94	50 - 55	10/5/10	Total Dissolved Solids (TDS) (mg/L)	580			NA	NA
PZ-113A	599.94	50 - 55	10/5/10	trans-1,2-Dichloroethylene	0 U	1.00	1	1,500	28,000
PZ-113A	599.94	50 - 55	10/5/10	Trichloroethylene	0 U	1.00	1	200	3,500
PZ-113A	599.94	50 - 55	10/5/10	Turbidity (NTU)	62.00			NA	NA
PZ-113A	599.94	50 - 55	10/5/10	Vinyl Chloride	0 U	1.00	1	930	17,000
PZ-113A	599.94	50 - 55	10/5/10	Xylenes (total)	0 U	3.00	1	41	730
PZ-113B	568.89	81 - 86	10/5/10	1,2-Dichlorobenzene	0 U	1.00	1	13	240
PZ-113B	568.89	81 - 86	10/5/10	1,2-Diphenylhydrazine	0 U	2.00	1	NA	NA
PZ-113B	568.89	81 - 86	10/5/10	3,3'-Dichlorobenzidine	0 U	0.30	1	4.50	81
PZ-113B	568.89	81 - 86	10/5/10	Aniline	0 U	4.00	1	4.00	36
PZ-113B	568.89	81 - 86	10/5/10	Benzene	1.90	1.00	1	200	1,900
PZ-113B	568.89	81 - 86	10/5/10	Benzidine	0 U	0.30	1	2.70	49
PZ-113B	568.89	81 - 86	10/5/10	Bromide (mg/L)	0 U	0.36	5	NA	NA
PZ-113B	568.89	81 - 86	10/5/10	Chloride (mg/L)	14	10	5	NA	NA
PZ-113B	568.89	81 - 86	10/5/10	Chlorobenzene	0 U	1.00	1	25	450
PZ-113B	568.89	81 - 86	10/5/10	cis-1,2-Dichloroethylene	0 U	1.00	1	620	11,000
PZ-113B	568.89	81 - 86	10/5/10	Dibutyl phthalate	0 U	5.00	1	9.70	75
PZ-113B	568.89	81 - 86	10/5/10	Dimethyl Phthalate	0 U	5.00	1	NA	NA
PZ-113B	568.89	81 - 86	10/5/10	Di-n-octyl Phthalate	0 U	5.00	1	NA	NA

Location ID	Elev. (ft msl)	Depth (ft bgs)	Sample Date	Analyte	Result (in ppb unless otherwise noted)	RDL	Dilution	FCV	FAV
PZ-113B	568.89	81 - 86	10/5/10	Dissolved Oxygen (DO) (mg/L)	0 U			NA	NA
PZ-113B	568.89	81 - 86	10/5/10	Ethylbenzene	0 U	1.00	1	18	320
PZ-113B	568.89	81 - 86	10/5/10	Fluoride	0 U	100	5	2,700	20,000
PZ-113B	568.89	81 - 86	10/5/10	Iron	500	200	1	NA	NA
PZ-113B	568.89	81 - 86	10/5/10	Iron, Ferric	0 U	200	1	NA	NA
PZ-113B	568.89	81 - 86	10/5/10	Iron, Ferrous	800	20	1	NA	NA
PZ-113B	568.89	81 - 86	10/5/10	Manganese	120	50	1	Hardness dependent	
PZ-113B	568.89	81 - 86	10/5/10	Methane	15	1.00	1	NA	NA
PZ-113B	568.89	81 - 86	10/5/10	Nitrate (as N)	0 U	100	5	NA	NA
PZ-113B	568.89	81 - 86	10/5/10	Nitrite (as N)	0 U	100	5	NA	NA
PZ-113B	568.89	81 - 86	10/5/10	o-Chloroaniline	12	10	1	NA	NA
PZ-113B	568.89	81 - 86	10/5/10	Orthophosphate (mg/L)	0.05	0.01	1	NA	NA
PZ-113B	568.89	81 - 86	10/5/10	Oxidation Reduction Potential (ORP) (mv)	-221			NA	NA
PZ-113B	568.89	81 - 86	10/5/10	p-Chloroaniline	0 U	10	1	NA	NA
PZ-113B	568.89	81 - 86	10/5/10	p-Cresol	0 U	10	1	25	450
PZ-113B	568.89	81 - 86	10/5/10	pH (SU)	7.85			NA	NA
PZ-113B	568.89	81 - 86	10/5/10	Potassium	0 U	1000	1	NA	NA
PZ-113B	568.89	81 - 86	10/5/10	Sodium	5,500	1000	1	NA	NA
PZ-113B	568.89	81 - 86	10/5/10	Specific Conductance (umhos/cm)	0.28			NA	NA
PZ-113B	568.89	81 - 86	10/5/10	Sulfide (mg/L)	0 U	1.00	1	NA	NA
PZ-113B	568.89	81 - 86	10/5/10	Temperature (Degrees F)	62.78			NA	NA
PZ-113B	568.89	81 - 86	10/5/10	Tetrachloroethylene	0 U	1.00	1	190	2,900
PZ-113B	568.89	81 - 86	10/5/10	Toluene	0 U	1.00	1	270	2,600
PZ-113B	568.89	81 - 86	10/5/10	Total Dissolved Solids (TDS) (mg/L)	190			NA	NA
PZ-113B	568.89	81 - 86	10/5/10	trans-1,2-Dichloroethylene	0 U	1.00	1	1,500	28,000
PZ-113B	568.89	81 - 86	10/5/10	Trichloroethylene	0 U	1.00	1	200	3,500
PZ-113B	568.89	81 - 86	10/5/10	Turbidity (NTU)	48			NA	NA
PZ-113B	568.89	81 - 86	10/5/10	Vinyl Chloride	0 U	1.00	1		

Location ID	Elev. (ft msl)	Depth (ft bgs)	Sample Date	Analyte	Result (in ppb unless otherwise noted)	RDL	Dilution	FCV	FAV
								930	17,000
PZ-113B	568.89	81 - 86	10/5/10	Xylenes (total)	0 U	3.00	1	41	730
WC-2D	598.49	59 - 62	9/21/10	pH (SU)	7.58			NA	NA
WC-2D	598.49	59 - 62	9/21/10	Specific Conductance (umhos/cm)	379			NA	NA
WC-2D	598.49	59 - 62	9/21/10	Temperature (Degrees F)	67.82			NA	NA
WC-2D	598.49	59 - 62	9/21/10	Turbidity (NTU)	47			NA	NA
WC-2D	598.49	59 - 62	10/6/10	1,2-Dichlorobenzene	0 U	1.00	1	13	240
WC-2D	598.49	59 - 62	10/6/10	1,2-Diphenylhydrazine	0 U	2.00	1	NA	NA
WC-2D	598.49	59 - 62	10/6/10	3,3`-Dichlorobenzidine	0 U	0.30	1	4.50	81
WC-2D	598.49	59 - 62	10/6/10	Aniline	0 U	4.00	1	4.00	36
WC-2D	598.49	59 - 62	10/6/10	Benzene	0 U	1.00	1	200	1,900
WC-2D	598.49	59 - 62	10/6/10	Benzidine	0 U	0.30	1	2.70	49
WC-2D	598.49	59 - 62	10/6/10	Chlorobenzene	22	1.00	1	25	450
WC-2D	598.49	59 - 62	10/6/10	cis-1,2-Dichloroethylene	0 U	1.00	1	620	11,000
WC-2D	598.49	59 - 62	10/6/10	Dibutyl phthalate	0 U	5.00	1	9.70	75
WC-2D	598.49	59 - 62	10/6/10	Dimethyl Phthalate	0 U	5.00	1	NA	NA
WC-2D	598.49	59 - 62	10/6/10	Di-n-octyl Phthalate	0 U	5.00	1	NA	NA
WC-2D	598.49	59 - 62	10/6/10	Dissolved Oxygen (DO) (mg/L)	0 U			NA	NA
WC-2D	598.49	59 - 62	10/6/10	Ethylbenzene	0 U	1.00	1	18	320
WC-2D	598.49	59 - 62	10/6/10	o-Chloroaniline	22	10	1	NA	NA
WC-2D	598.49	59 - 62	10/6/10	Oxidation Reduction Potential (ORP) (mv)	-222			NA	NA
WC-2D	598.49	59 - 62	10/6/10	p-Chloroaniline	0 U	10	1	NA	NA
WC-2D	598.49	59 - 62	10/6/10	p-Cresol	0 U	10	1	25	450
WC-2D	598.49	59 - 62	10/6/10	pH (SU)	7.35			NA	NA
WC-2D	598.49	59 - 62	10/6/10	Specific Conductance (umhos/cm)	0.43			NA	NA
WC-2D	598.49	59 - 62	10/6/10	Temperature (Degrees F)	59.18			NA	NA

Location ID	Elev. (ft msl)	Depth (ft bgs)	Sample Date	Analyte	Result (in ppb unless otherwise noted)	RDL	Dilution	FCV	FAV
WC-2D	598.49	59 - 62	10/6/10	Tetrachloroethylene	0 U	1.00	1	190	2,900
WC-2D	598.49	59 - 62	10/6/10	Toluene	4.20	1.00	1	270	2,600
WC-2D	598.49	59 - 62	10/6/10	Total Dissolved Solids (TDS) (mg/L)	300			NA	NA
WC-2D	598.49	59 - 62	10/6/10	trans-1,2-Dichloroethylene	0 U	1.00	1	1,500	28,000
WC-2D	598.49	59 - 62	10/6/10	Trichloroethylene	0 U	1.00	1	200	3,500
WC-2D	598.49	59 - 62	10/6/10	Turbidity (NTU)	177			NA	NA
WC-2D	598.49	59 - 62	10/6/10	Vinyl Chloride	0 U	1.00	1	930	17,000
WC-2D	598.49	59 - 62	10/6/10	Xylenes (total)	0 U	3.00	1	41	730
WC-2S	620.29	37.5 - 40.5	9/21/10	pH (SU)	7.42			NA	NA
WC-2S	620.29	37.5 - 40.5	9/21/10	Specific Conductance (umhos/cm)	521			NA	NA
WC-2S	620.29	37.5 - 40.5	9/21/10	Temperature (Degrees F)	66.92			NA	NA
WC-2S	620.29	37.5 - 40.5	9/21/10	Turbidity (NTU)	19			NA	NA
WC-2S	620.29	37.5 - 40.5	10/6/10	1,2-Dichlorobenzene	630	10	10	13	240
WC-2S	620.29	37.5 - 40.5	10/6/10	1,2-Diphenylhydrazine	0 U	2.00	1	NA	NA
WC-2S	620.29	37.5 - 40.5	10/6/10	3,3'-Dichlorobenzidine	0 U	0.30	1	4.50	81
WC-2S	620.29	37.5 - 40.5	10/6/10	Aniline	0 U	4.00	1	4.00	36
WC-2S	620.29	37.5 - 40.5	10/6/10	Benzene	0 U	1.00	1	200	1,900
WC-2S	620.29	37.5 - 40.5	10/6/10	Benzidine	0 U	0.30	1	2.70	49
WC-2S	620.29	37.5 - 40.5	10/6/10	Chlorobenzene	7.80	1.00	1	25	450
WC-2S	620.29	37.5 - 40.5	10/6/10	cis-1,2-Dichloroethylene	0 U	1.00	1	620	11,000
WC-2S	620.29	37.5 - 40.5	10/6/10	Dibutyl phthalate	0 U	5.00	1	9.70	75
WC-2S	620.29	37.5 - 40.5	10/6/10	Dimethyl Phthalate	0 U	5.00	1	NA	NA

Location ID	Elev. (ft msl)	Depth (ft bgs)	Sample Date	Analyte	Result (in ppb unless otherwise noted)	RDL	Dilution	FCV	FAV
WC-2S	620.29	37.5 - 40.5	10/6/10	Di-n-octyl Phthalate	0 U	5.00	1	NA	NA
WC-2S	620.29	37.5 - 40.5	10/6/10	Dissolved Oxygen (DO) (mg/L)	0 U			NA	NA
WC-2S	620.29	37.5 - 40.5	10/6/10	Ethylbenzene	0 U	1.00	1	18	320
WC-2S	620.29	37.5 - 40.5	10/6/10	o-Chloroaniline	0 U	10	1	NA	NA
WC-2S	620.29	37.5 - 40.5	10/6/10	Oxidation Reduction Potential (ORP) (mv)	-161			NA	NA
WC-2S	620.29	37.5 - 40.5	10/6/10	p-Chloroaniline	0 U	10	1	NA	NA
WC-2S	620.29	37.5 - 40.5	10/6/10	p-Cresol	0 U	10	1	25	450
WC-2S	620.29	37.5 - 40.5	10/6/10	pH (SU)	7.38			NA	NA
WC-2S	620.29	37.5 - 40.5	10/6/10	Specific Conductance (umhos/cm)	0.23			NA	NA
WC-2S	620.29	37.5 - 40.5	10/6/10	Temperature (Degrees F)	59.18			NA	NA
WC-2S	620.29	37.5 - 40.5	10/6/10	Tetrachloroethylene	14	1.00	1	190	2,900
WC-2S	620.29	37.5 - 40.5	10/6/10	Toluene	19	1.00	1	270	2,600
WC-2S	620.29	37.5 - 40.5	10/6/10	Total Dissolved Solids (TDS) (mg/L)	170			NA	NA
WC-2S	620.29	37.5 - 40.5	10/6/10	trans-1,2-Dichloroethylene	0 U	1.00	1	1,500	28,000
WC-2S	620.29	37.5 - 40.5	10/6/10	Trichloroethylene	5.90	1.00	1	200	3,500
WC-2S	620.29	37.5 - 40.5	10/6/10	Turbidity (NTU)	108			NA	NA
WC-2S	620.29	37.5 - 40.5	10/6/10	Vinyl Chloride	0 U	1.00	1	930	17,000
WC-2S	620.29	37.5 - 40.5	10/6/10	Xylenes (total)	0 U	3.00	1	41	730

Attachment 2. Response to EPA Comments on PZ-111A Investigation Work Plan

This attachment is a response to U.S. EPA comments (dated September 14, 2010) on the PZ-111A Investigation Work Plan. These responses reflect the data gathered in the fall of 2010 in accordance with the PZ-111A Investigation Work Plan and subsequent addenda. Many of the comments were answered in a previous communication dated October 1, 2010. Those responses are identified and repeated herein in order to provide a single reference to the agency comments. The remaining comments, previously deferred to the PZ-111A Investigation Report, are addressed herein. Each of the U.S. EPA comments is repeated in italics, with the PSDs' response below.

(1) Contaminant detections in well PZ-111A go above and beyond toluene. Data collection and analysis should go beyond toluene.

This issue was addressed in SAP Addenda No 3 and No 4, dated September 3, 2010 and September 9, 2010, respectively. In addition, as requested, analysis of samples collected from wells PZ-111A, PZ-111B, PZ-113A, PZ-113B and MW-121 included the parameters presented in Table A1. Sample locations NF-LG-1, PZ-112A, PZ-112B and MW-13 were analyzed for standard VOCs, standard SVOCs and low level benzidine and 3,3'-dichlorobenzidine.

TABLE A1. PARAMETERS TESTED FOR IN PZ-111 AREA WELLS.

PZ-111A, PZ-111B	PZ-113A, PZ-113B, MW-121
Aniline	Aniline
Azobenzene	Azobenzene
Benzene	Benzene
Benzidine	Benzidine
2-Chloroaniline	2-Chloroaniline
4-Chloroaniline	4-Chloroaniline
Chlorobenzene	Chlorobenzene
3,3'-Dichlorobenzidine (and isomers)	3,3'-Dichlorobenzidine (and isomers)
1,2-Dichlorobenzene	1,2-Dichlorobenzene
1,2-Dichloroethylene (ethene) cis	1,2-Dichloroethylene (ethene) cis
1,2-Dichloroethylene (ethene) trans	1,2-Dichloroethylene (ethene) trans
Dimethyl phthalate	Dimethyl phthalate

Di-n-Butytpthalate	Di-n-Butytpthalate
Di-n-Octylphthalate	Di-n-Octylphthalate
Ethylbenzene	Ethylbenzene
4-Methylphenol	4-Methylphenol
Sulfate	Sulfate
Sulfite	Sulfite
Tetrachloroethylene	Tetrachloroethylene
Toluene	Toluene
Trichloroethylene	Trichloroethylene
Vinyl chloride	Vinyl chloride
Xylenes (total)	Xylenes (total)
Dissolved Solids	
Suspended Solids	
Ammonia Nitrogen	
Chemical Oxygen Demand	
Water Elev.	Water Elev.
PH,	PH,
Conductivity (mS/cm),	Conductivity (mS/cm),
Turbidity (ntu),	Turbidity (ntu),
DO (mg/L),	DO (mg/L),
Temp. (C°),	Temp. (C°),
TDS (g/L),	TDS (g/L),
ORP (mV)	ORP (mV)
Aluminum	
Antimony	
Arsenic	
Barium	

Beryllium	
Cadmium	
Copper	
Iron	
Lead	
Mercury	
Nickel	
Silver	
Vanadium	
Zinc	

(1.a) For a complete analysis of the PZ-111A contamination, more than just VOCs must be sampled and analyzed. At a minimum the other organic COCs at this site (benzidine, aniline, etc.) need to be analyzed for. In addition, inorganics (specifically the "major ions" and ORP-sensitive compounds) should be included.

Part of this comment is addressed in response to Comment 1 above. In addition to the analytes listed in Table 1, samples from wells PZ-111A, PZ-111B, PZ-113A, PZ-113B and MW-121 were analyzed for the ORP-related compounds and major ions as requested. These compounds are listed in Table A2.

TABLE A3. MAJOR IONS AND ORP-RELATED PARAMETERS TO BE TESTED FOR IN PZ-111 AREA WELLS.

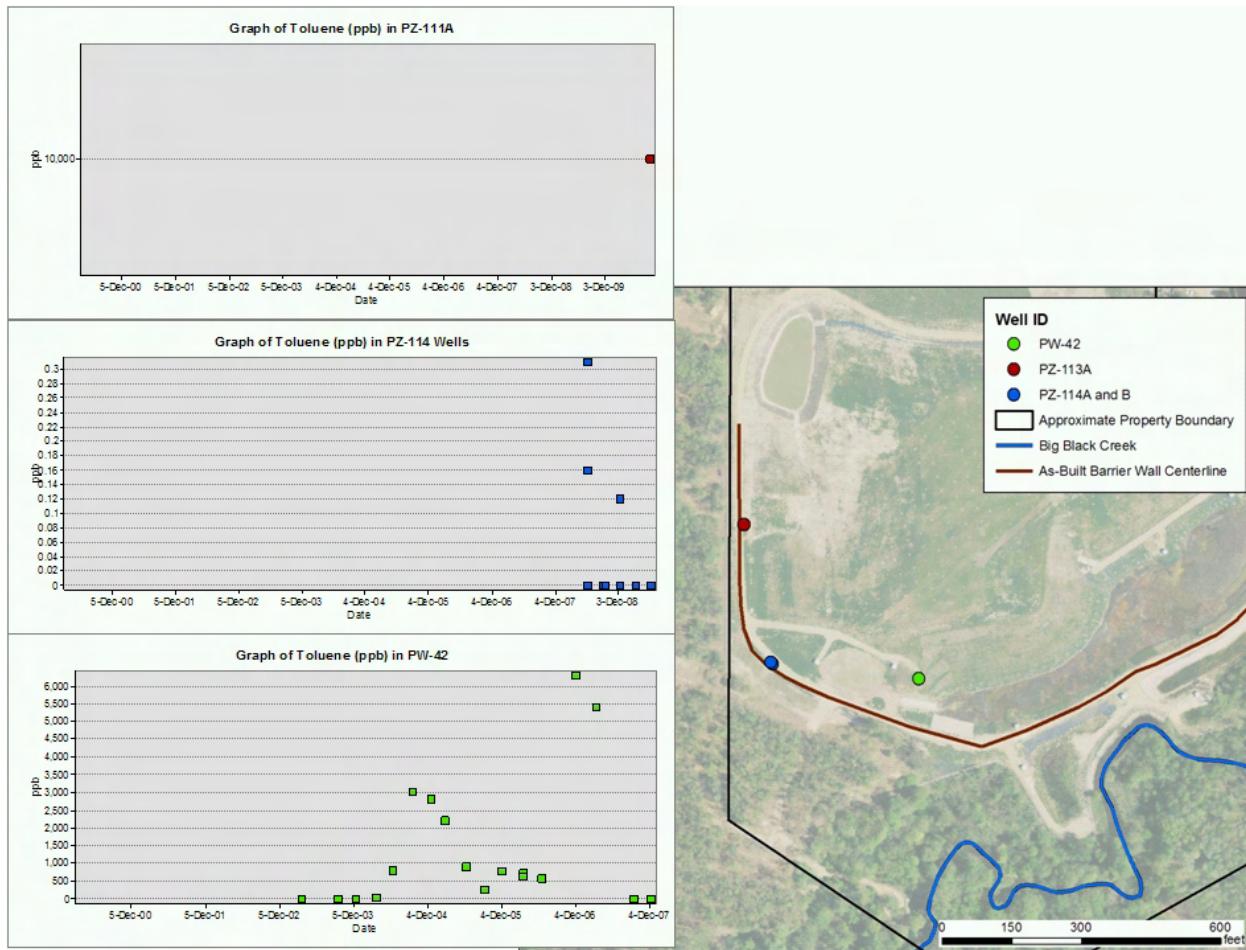
ORP-related	Major Ions
Nitrate	Manganese
Nitrite	Bromide
Sulfate	Nitrite
Sulfide	Nitrate
Methane	Chloride
Ferrous Iron	Sulfate
Ferric Iron	Fluoride

DO	Sodium
ORP	Potassium
pH	ortho-Phosphate-P

(2) More than 4,000 ppb of toluene was detected in well PW-42 during June 2007. There have been high detections of toluene in the western part of the site before the "recent" PZ-111A spikes.

The highest detection across the entire western half of the former lagoon area prior to the PZ-111A anomaly was 6,300 ppb on December 6, 2006, in pumping well PW-42 (see figure A1 below). The concentrations in this well subsequently declined to non-detect by 2008. The most recent time series data immediately downgradient from the PZ-111A area inside the wall is in the PZ-114 well cluster (figure A1). The highest concentration measured in PZ-111B was 0.3 ppb in 2008 and since then toluene has decreased to non- detect in this well. Toluene has never been detected in well PZ-114A (see figure A1 below). The monitoring well immediately on the inside of the well from PZ-111A (see figure A1), PZ 113A, had a toluene concentration of 10,000 ppb in the Fall 2010 sampling round, compared against a toluene concentration outside of the wall of 190,000 ppb. The toluene concentration gradient is from outside of the wall to the inside. The hydraulic gradient is also from outside of the wall to the inside.

There is no chemical data, toluene or otherwise, past or present, inside or outside the lagoon area, within or outside the boundaries of the Lomac plant, that supports, directly or indirectly that PZ-111A 2009/2010 toluene contamination originated in OU1 or OU2. The toluene spike in PZ-111A is likely from a localized source.

FIGURE A10. HISTORIC TOLUENE IN WESTERN LAGOON AREA GROUNDWATER.

(3) Page 5. The well depth for PZ-111A must be confirmed. U.S. EPA believes this well may be more on the scale of 38 feet deep.

Response in October 1, 2010 document.

The installation log confirms the information contained in the PZ-111A Investigation Work Plan.

(4) Figure 2. A graph of toluene (and other COCs) concentrations through time in well PZ-111A would be far more informative than this graph. This graph should be replaced.

Below are time series graphs of toluene and other COC concentrations that exceeded performance standards at PZ-111A (figures A2 through A5). These are discussed in the body of this PZ-111 Investigation Report.

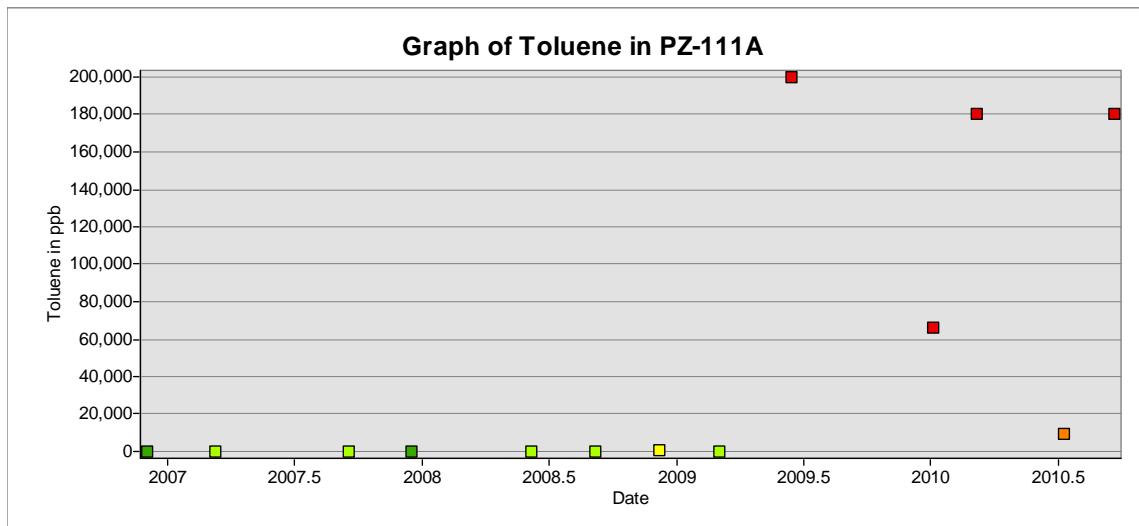
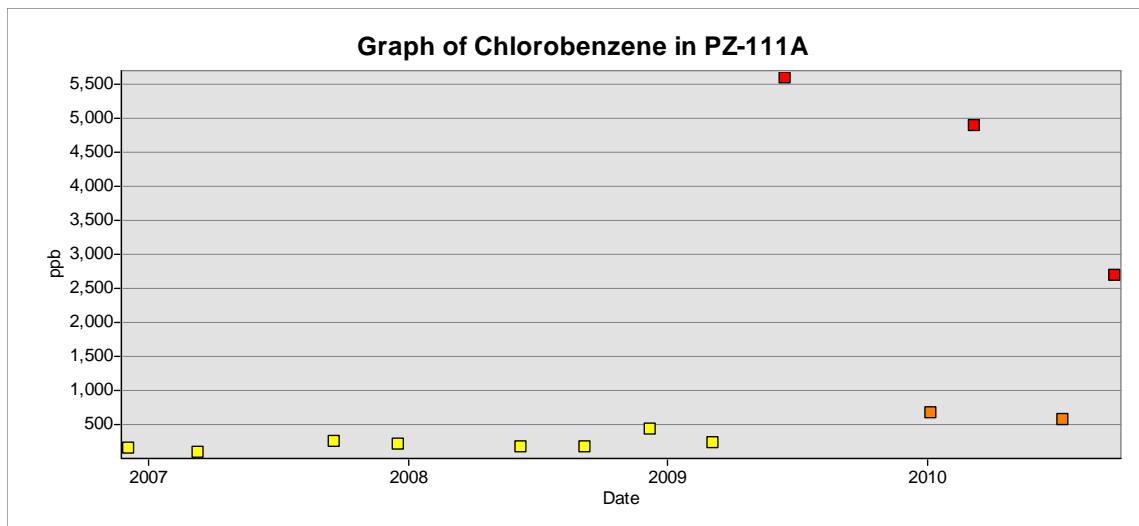
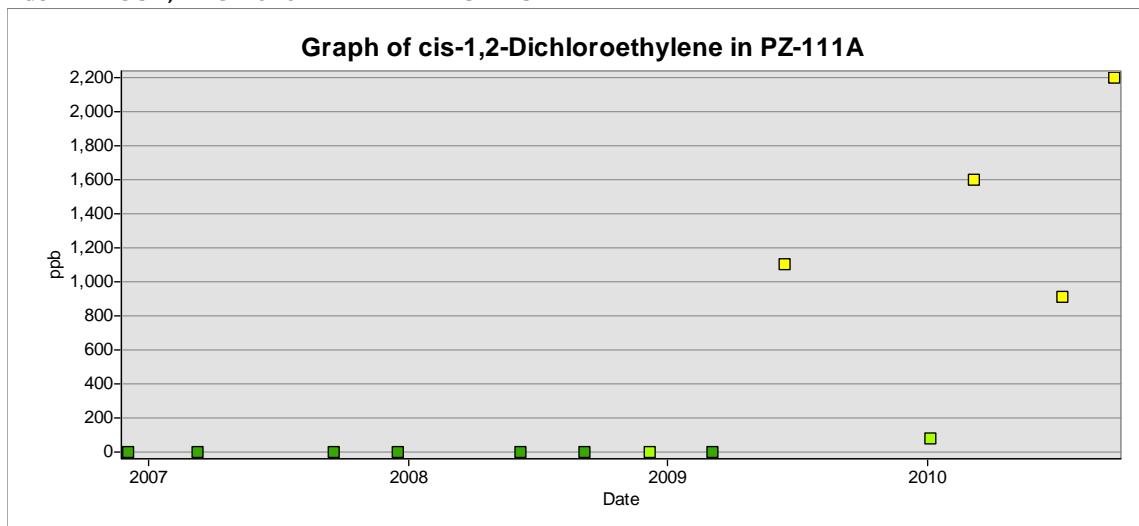
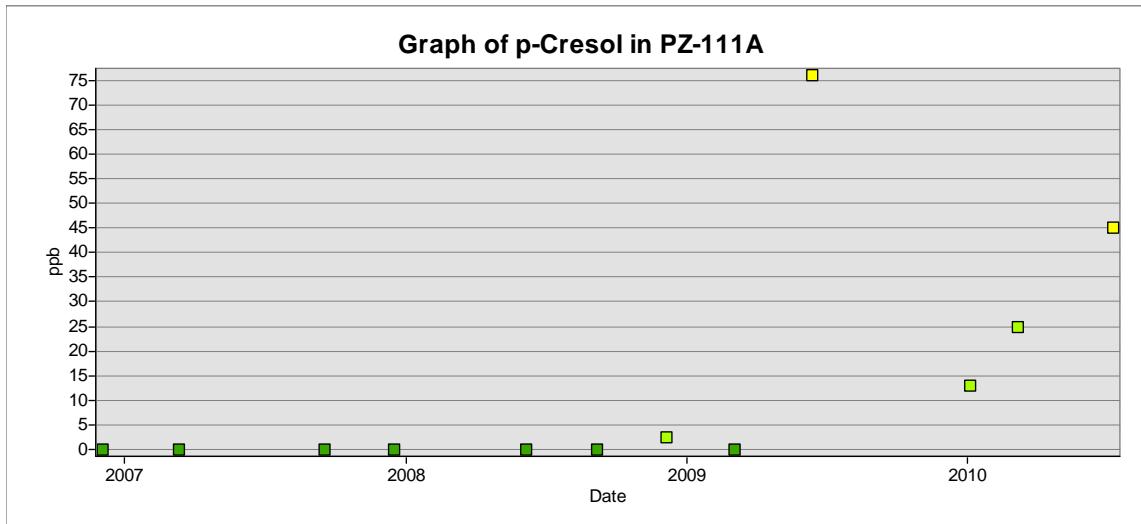
FIGURE A2. TOLUENE TIME SERIES IN PZ-111A**FIGURE A3. CHLOROBENZENE TIME SERIES IN PZ-111A****FIGURE A4. CIS-1,2-DICHLOROETHYLENE TIME SERIES IN PZ-111A**

FIGURE A5. P-CRESOL TIME SERIES IN PZ-111A

It can be concluded from the above graphs that the COCs exceeding performance standards in well PZ-111A all occurred together with the anomalous detection of 200,000 ppb toluene in June 2009.

(5) *Section 3.3. Considering the likely hydraulic isolation created by the Barrier Wall, there has not been much increase in the southerly component of groundwater flow in the area of well PZ-111A. U.S. EPA has noted minimal change in groundwater flow direction near well PZ-111A before and after the barrier wall was installed.*

Prior to the construction of the barrier wall there was a distinct easterly component to the groundwater flow along the alignment of the barrier wall. The groundwater flow is now due south along the outside of the western wall, with a much more distinct southeasterly component encountered at the southern bend of the barrier wall in the vicinity of the PZ-112 wells.

There is now a 0.25-ft head differential across the barrier wall (higher on the outside) at the PZ-111/PZ-113 well pair. As the groundwater flows into the floodplain along the outside of the barrier wall, the elevations decline relative to the backwater that is created inside the wall. The head differential is approximately 2 feet across the wall (higher on the inside) at the PZ-112/PZ-114 well pair. The barrier wall has clearly altered the water table elevations and flow directions.

(6) *Figure 5. Water levels in these wells should be taken concurrently with remaining wells in the study area to obtain the best overall depiction of site conditions. The “remaining wells” should include a good number of the wells located inside the general area of the slurry wall near the lagoons. For example, MW-3, MW-80 cluster, WC-26 cluster, WC-27 cluster, MW-35 cluster, MW-41. Some wells further west must also be considered (e.g., MW-5 cluster, MW-42, MW-12).*

All of the monitoring wells mentioned in this comment were added to the hydraulic monitoring program as part of the September sampling event with the following exceptions: Wells WC-26S and WC-26D appeared to have been destroyed and water levels could not be taken. The MW-80 cluster and well MW-41 were decommissioned in 2006 prior to the re-grading of the site and construction of the treatment wetland. Well OW-105A was dry, and the water level measured in well MW-51-40 is not considered to be representative of water level in the aquifer, because this well did not recharge after pumping. The groundwater contours presented in response to Comment 5 above are based on a synoptic groundwater elevation event on September 22, 2010. All water level measurement data from the synoptic event is presented as Attachment 3.

(7) If there are any permanent surface water bodies inside the Barrier Wall area, they must be measured for water levels.

Water level in the surface water body on the northwest of the Site above the barrier wall western terminus was measured, and the surface water was sampled (NF-LG-1) as described in the response to Comment 1 above.

(9) Page 9. If there is evidence of sediment infilling, the “status check needed” wells must be developed and sampled.

Addressed in the PZ-111A Work Plan Addendum dated September 10, 2010.

All wells with the “status check needed” designation which were not dry or decommissioned were redeveloped 14 days prior to sampling due to the length of time they sat without being regularly sampled.

(10) Confirmation is required regarding installation of a new well in the VAS borehole at the PZ-111 cluster, at the depth of maximum contamination.

Although unexpected, because the 3 foot screen of PZ-111A is 30 feet below the water table, the VAS boring encountered the toluene contamination centered on the same interval as the PZ-111A well screen. Between the sample taken at the PZ-111A screen interval and the samples taken immediately above and below that, toluene concentration in the VAS dropped 98%.

(11) Section 4.2. U.S. EPA requires testing for the presence of Non- Aqueous Phase Liquid (NAPL) in PZ111-A and the surrounding wells, all of which have not been sampled recently. In addition, the following compounds that may serve as indicators of contamination in groundwater from property to the north should be analyzed for: 2-chloro,4-aminotoluene (2-cat), 2-amino 5-chloro-toluenesulfonic acid (c-amine), Dipropylamine, Dimethylformamide, Monochlorobenzene, Phosphorus Oxytrichloride, P-Toluidine, Tetranitromethane.

Parsons has tested for NAPL during every sampling event and has detected none. However, PZ-111A is screened below the water table, which could have been preventing detection of NAPL. NAPL was tested for at the water table in the PZ-111 VAS boring made immediately downgradient of PZ-111A in October 2010 and was not detected. A concentration of 2,700 ppb of toluene was detected in the water table sample of the VAS. This concentration is not indicative of NAPL, and instead is indicative of diffusion from the higher concentrations 25 to 30 feet below.

(12) U.S. EPA does not believe that ratio analysis (or another type of source analysis) will provide much information of value. For example, the previously- provided analysis of toluene percent in groundwater to indicate an offsite source was not convincing.

Empirical concentration data has confirmed the conclusions of the ratio analysis, which is that the toluene in well PZ-111A is anomalous to all other prior chemical data from site sampling.

(13) Section 4.3. Soil gas sampling and analysis should be considered to help identify source area(s).

Soil gas analysis may be useful if there were a suspected source area to investigate. However, the groundwater investigation has identified that the source for the recent detections in PZ-111A is not inside the barrier wall or related to OU1 or OU2 releases. In addition, given the vertical profile of toluene in the PZ-111 VAS boring, there is no identified relevancy for the soil gas sampling in resolving how the contamination came to be located within the PZ-111A screen interval.

(14) Section 5.0. This analysis must also include a thorough discussion of chemical data obtained from each of the potential and known source areas, including each of the lagoons and the property to the north of the lagoons. The timing of remedial activity in the lagoon areas should also be evaluated because this may have resulted in a short term increase in contaminants released from the lagoons.

No toluene was detected in the current surface water body northeast of PZ-111A (a former lagoon). Toluene was detected in wells WC-2S and WC-2D on the property north of the lagoons, but at concentrations that render this implausible as a potential source area.

Each of the former lagoons were investigated as part of the 1991 Remedial Investigation. In this study, Lagoon 9 was found to have had the highest organics concentrations in sludge, and Lagoon 3 had the highest organics concentrations in soil. The maximum toluene results found in lagoon sludges and soils in a 1988 investigation are presented in Table A3.

TABLE A3. 1988 TOLUENE MEASUREMENTS IN LAGOON SLUDGES AND SOILS.

Lagoon	Matrix	Contaminant	Concentration	Units
1	sludge	toluene	8.9	ppm
1	soil	toluene	0.170	ppm
2			Not detected	
3	sludge	toluene	1,100	ppm
4			Not detected	
5	sludge	toluene	0.017	ppm
5	soil	toluene	0.003	ppm
6	sludge	toluene	130	ppm
8	sludge	toluene	80	ppm
9	sludge	toluene	1.2	ppm
9	soil	toluene	16	ppm
10	sludge	toluene	0.009	ppm
10	soil	toluene	0.21	ppm

The only lagoon in which toluene was detected at high enough concentrations to cause a 200 ppm concentration in groundwater was Lagoon 3, on the east side of the site. It is highly unlikely that contamination from Lagoon 3 ended up in well PZ-111A, which is not downgradient of Lagoon 3. Lagoon 6 had elevated levels of toluene in sludge, but any contamination emanating from Lagoon 6 since the construction of the barrier wall would be prevented from reaching PZ-111A.

The barrier wall construction was completed in December 2005. Any remedial activity occurring after that, such as the construction of the treatment wetland, could not have affected well PZ-111A without going through or around the barrier wall. The data collected in Fall 2010 establishes that this has not happened.

(15) Conjecture regarding any releases from the Lomac explosion will not be adequate to confirm a contaminant source to the north (see Item (11)). Chemical analyses must include all site related COCs as well as field parameters and should include inorganics.

Constituents other than toluene are present at PZ-111A. Analyses limited to toluene or BTEX compounds solely is incomplete.

Conjecture was not offered as adequate to confirm the location of a source. This was one of the hypotheses that the data collection effort was conducted to test. The data collection effort was also constructed to test the hypothesis that the contaminant source may be inside the barrier wall. The investigation at PZ-111A was not limited to toluene, as discussed in response to Comments 1 and 2.

(16) *Appendix A. It is premature to presume a toluene spike is associated with a non-continuous release. It seems far more likely that this may be a continuous source with the appearance of toluene in PZ-111A potentially associated with lagoon activity, system hydraulics imposed by the barrier wall, the treatment wetland, and/or cessation of pumping within the barrier wall. It is possible that changes in the chemistry within the aquifer (mostly ORP/DO) may have created conditions favorable for the persistence of toluene and other compounds. Toluene concentrations observed at PZ111A are near the NAPL range and migration of this contaminant must be considered.*

The U.S. EPA's hypotheses were tested by analyzing wells PZ-113A and MW-121 for toluene. If there were a continuous source associated with lagoon activity, barrier wall hydraulics, the treatment wetland and/or cessation of pumping, the toluene would have to be either passing through the barrier wall at PZ-113A, in which case that well would contain higher concentrations of toluene than PZ-111A in order to have penetrated the wall at such magnitude; or the toluene would have to be moving around the western terminus of the barrier wall, in which case some toluene should still be present in well MW-121. No toluene was present in MW-121, and the toluene concentration present in PZ-113A was an order of magnitude lower than the toluene in PZ-111A. Furthermore, hydraulic data indicate that in the PZ-111 area, the groundwater level is higher outside the wall than inside the wall, which would make it physically impossible for contamination to be passing from the inside to the outside of the wall in that location.

One of the prior hypotheses that the toluene in well PZ-111A may have come from an upgradient buried tank release is not consistent with the data, either. If an upgradient source were responsible for the toluene, whether it was a release from a degraded tank, or whether the groundwater elevation reached a buried source, that toluene would have traveled on the water table. Therefore, the PZ-111 VAS boring should have detected the highest concentrations of toluene at the water table. Instead, the highest concentrations were detected about 25 feet deeper, at the screen interval of PZ-111A.

The concentrations in PZ-111A are indicative of LNAPL. However, LNAPL concentrations have never been encountered on the site, have not been found anywhere north, west or east of the western wall, and were not encountered in the recent VAS well adjacent to PZ-

111A. The proposed pumping of PZ-111A may shed light on the likely source of this data anomaly.

The worst-case scenario for migration of the toluene at PZ-111A has been estimated using a one-dimensional simulation, describe in the PZ-111A Investigation Data Report. The findings are that if the toluene at PZ-111A were traveling downgradient under worst case scenario conditions, it would not lead to a risk to human health or the environment, and concentrations should have already been detected at wells that were sampled downgradient. No toluene has been detected downgradient.

(17) A.2. It is premature to presume that Lagoon 3 is the only one of the lagoons that could produce the toluene concentrations in PZ-111A.

One hypothesis to explain the PZ-111A toluene spike is that the former lagoon area is the source. If that is the case, then one or more of the former lagoons would be the source of the toluene. The presumption that any lagoon source would most likely be Lagoon 3 was made based on historical data collected in the 1980s, presented in the 1991 Remedial Investigation of the site (see the reply to Comment 14 above). The RI documents the chemicals that were disposed of in the lagoons, and documents the results of contaminant testing in the sludges within the lagoons and the soils beneath the lagoons. The potential for lagoons other than Lagoon 3 to have been sources for toluene concentrations in groundwater of this magnitude 30 years later is discussed in response to Comment 14 above.

(18) A.3. See Item (11) to provide better evidence that contamination may be migrating from the former Lomac area. See Item (16) because numerous changes at the site could help explain toluene trends and/or a contaminant source.

The responses to this comment are provided in response to Comments 11 and 16.

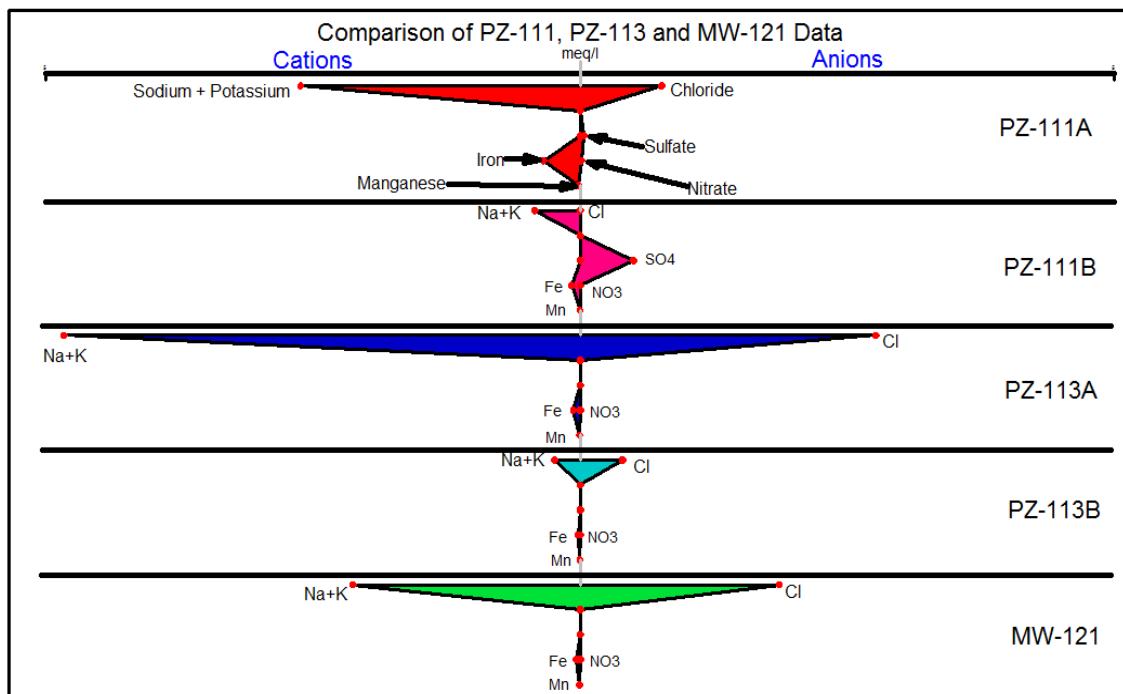
(19) Appendix B. There is no information to verify the statement that BTEX ratios from a single source do not change. It is premature to presume that there is (or has been) hydraulic and geochemical stability, and results from one study performed 15 years ago are not adequate. PZ-111A is on the periphery of the lagoon area and the larger plume, and it is likely that source chemistry and the hydraulic/ geochemical conditions in this area differ from those within the plume as a whole. It is likely these factors will result in contaminant conditions that differ from those of the overall plume, negating the usefulness of the ratio analysis.

BTEX ratios from a single source will change, and under similar geochemical conditions (such as: in the same aquifer, in the same soil, i.e., at the same site), the ratios will change at the same rate. Because BTEX ratios from the same source do change over time, the ratio of BTEX can, for example, be used to determine whether a release occurred 30 years ago or 5

years ago. Unfortunately, in this situation, ratio analysis is not practical for dating the release, as contrary to virtually all other toluene detections on the site, the PZ-111A detections contain no benzene. Ratio analysis is not necessary to conclude that this is an unusual finding, given the pattern of benzene/toluene concentrations on the site for the last 20 years.

An analysis of the major ions in wells PZ-111A, PZ-111B, MW-121, PZ-113A and PZ-113B shows that the geochemical conditions in each well are more dependent on the depth of the screen within the aquifer than on whether or not the well is inside the lagoon area, outside the lagoon area, or upgradient of it (Figure A6).

FIGURE 11. STIFF DIAGRAM OF MAJOR IONS ANALYZED FOR IN PZ-111 WELLS, PZ-113 WELLS AND MW-121.



(20) Appendix B, p. 22. There is an inconsistency in the discussion of BTEX ratios in the second paragraph of p. 22. If there are “Differences in biodegradation rates and retardation factors among the BTEX analytes,” then there can be differences in ratios within a single plume as well as between plumes. The contaminant suite in this area goes above and beyond BTEX, and analysis of all the data is required to identify contamination sources.

BTEX ratios were not used in the assessment of the data.

(21) U.S. EPA notes that if the Lomac explosion resulted in a non-continuous toluene release whose maximum concentrations passed the area of the PW wells along the southern part of the barrier wall by 2007, the plume should have been well past the PZ-

111 cluster by 2010. PZ-111 is closer to the area of the Lomac explosion. The PZ111 cluster is peripheral to the plume in the PW area.

The investigation indicates that Lomac is not the source of the contamination in PZ-111A.

(22) Appendix C. Lithologic samples should be collected and analyzed.

Lithologic logs of the VAS borings are provided in Attachment 4.

(23) U.S. EPA requires that, to ensure stable water levels in the Geoprobe rod and HSA drilling and to ensure sufficient removal of water impacted by drilling, three well volumes must be purged before sampling. Field parameters must be measured every 5 minutes. The discharge rate must be reduced to approximately 250 ml/min during sample collection.

Per subsequent email discussion, VAS samples were collected in accordance with the previous VAS sampling protocol

(24) U.S. EPA would like to reinforce the statement in the August 24, 2010 electronic mail message that site monitoring must ensure no contamination is migrating off site or to Big Black Creek, and therefore future sampling events beyond this September event must include an adequate number of sampling points/ monitoring wells.

Monitoring during the September/October 2010 event took place in wells upgradient of and in Big Black Creek and the GSI, and in wells upgradient of and on the property boundary to ensure that no contamination is migrating off-site or to Big Black Creek. A detailed Meander Bend evaluation work plan to assess groundwater/surface water vectors south of the barrier wall was submitted in October 2010. The planned assessment will incorporate all existing geochemical data, new geochemical sampling in the vicinity of the Meander Bend, continuous and point potentiometric data, continuous temperature data, dye studies, and hydraulic and temperature modeling to confirm conditions south of the Meander Bend. Future sampling events are currently being planned.

(25) The PSDs must monitor dissolved oxygen, pH, conductivity, and ORP in the treatment wetland, at an adequate depth within the wetland. Measurements must be made every 20 minutes. Water levels from the on-site wetlands must be collected, to help "...determine whether they contain contaminants from the groundwater...".

This comment was not discussed and will be addressed in the forthcoming Treatment Wetland Evaluation Work Plan.

(26) U.S. EPA does not believe water-quality samples from surface water is useful information. Sampling GSI wells during "base" flow conditions might be beneficial to

assessing surface-water/groundwater interactions. Manual water levels must be taken from the stream gages to verify their accuracy.

Sampling of GSI and surface water will continue and manual water levels are being collected to confirm automatic gages.

(27) In order to determine if contamination is migrating south of/ under the creek and beyond, water levels and water quality from several wells south of the creek should be measured.

South of Big Black Creek, wells MW-52-22, MW-52-62 and MW-52-112 – chosen as representative of the shallow, medium and deep depths of the aquifer south of the Meander Bend Area – were sampled in the Fall 2010 sampling event (Table A2). All COCs were non-detect in those wells (results are in Attachment 1).

(28) U.S. EPA does not understand the value in the VAS locations shown in Figure 3, but does not object if the PSDs want to spend funds to drill at these locations. These locations may not provide useful information, particularly if there are no plans to also collect and analyze soil samples for contaminants and other parameters of interest to remediation (such as total organic carbon). If possible, U.S. EPA recommends that a location be added (or revised) for VAS in the middle of the meander bend south of the river. It may not be possible to get a drill rig in this area.

Additional VAS borings were installed in the Meander Bend Area and this data will be discussed in a forthcoming data report. Regarding VAS south of Big Black Creek, the PSDs agree and this issue is addressed in the forthcoming Data Gap Assessment.

(29) VAS must penetrate the full thickness of the aquifer. The depth of VAS sampling must be confirmed.

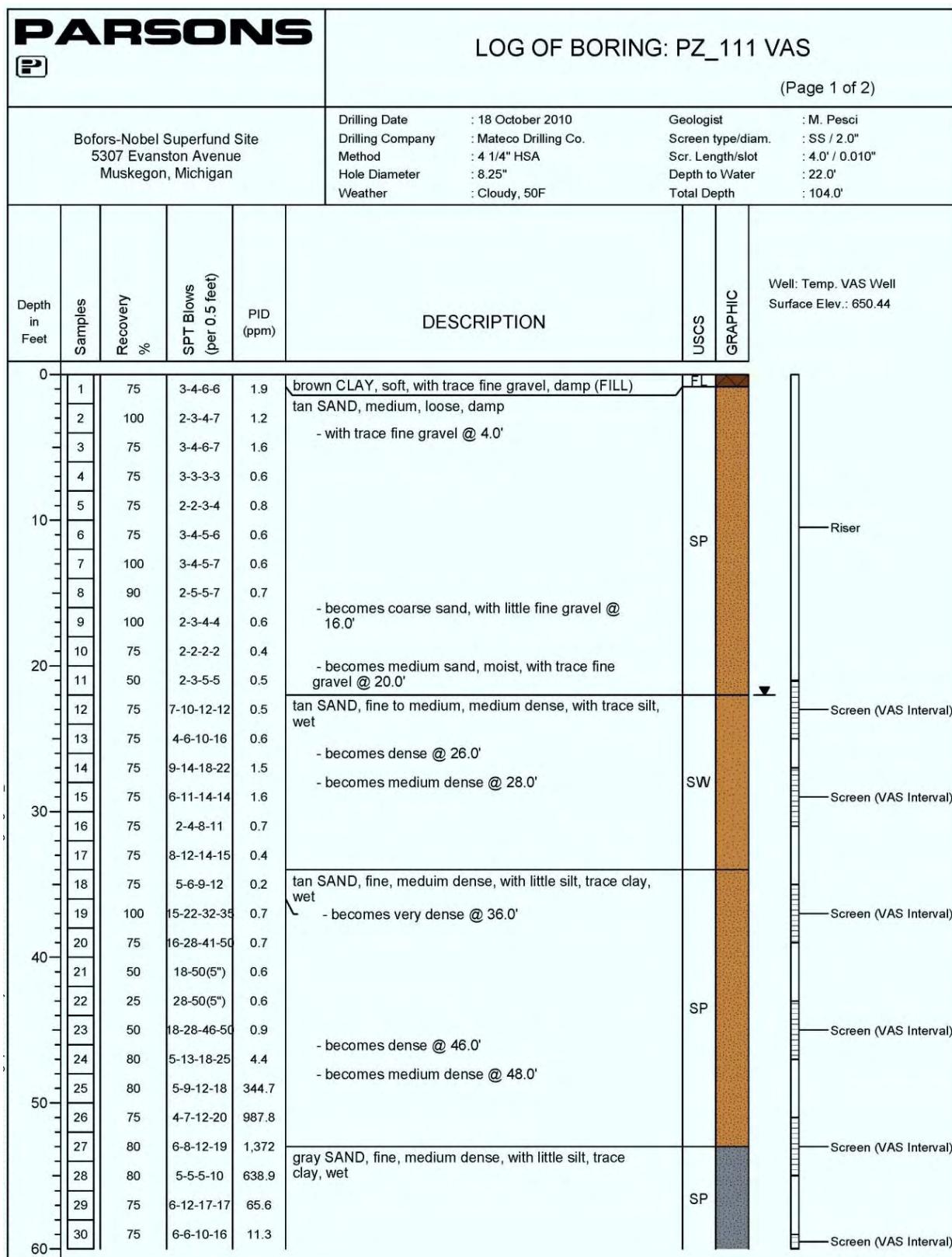
The VAS borings did extend to the till and the depth of VAS sampling was confirmed through lithologic logging. The lithologic log of PZ-111 VAS is presented in Attachment 4.

Attachment 3. September 22, 2010 Water Level Measurements

Location ID	Elevation (ft msl)	Depth to Water (ft below top of casing)	Comment
DT-1		1.64	
DT-2	622.1		Elevation sited using PZ-118 TOC and PW-47 pad
GSI-1-10		6.72	
GSI-1-20		6.55	
GSI-1-30		6.22	
GSI-1-SW		1.2	
GSI-2-10		6.22	
GSI-2-20		5.97	
GSI-2-30		5.72	
GSI-2-SW		0.16	
GSI-3-10		7.18	
GSI-3-20		7.81	
GSI-3-30		7.5	
GSI-3-SW		2.19	
GSI-4-10		5.64	
GSI-4-20		5.68	
GSI-4-30		5.53	
GSI-4-SW		1.19	
GSI-5-10		6.12	
GSI-5-20		5.7	
GSI-5-30		3.74	
GSI-5-SW		1.56	
MW-11A		12.03	
MW-11B		25.25	
MW-11C		23.35	
MW-11E		6.97	
MW-12		29.57	
MW-121		27.77	
MW-123A		4.07	
MW-123B		4.32	
MW-125A		5.72	
MW-125B		5.19	
MW-13		0.8	
MW-133A		9.58	
MW-133B		9.62	

MW-51-40		37.11	Well did not recharge after re-development
MW-51-44		28.5	
MW-51-54		28.96	
MW-52-102		9.8	
MW-52-112		9.47	
MW-52-117		9.85	
MW-52-12		9.51	
MW-52-22		9	
MW-52-32		8.68	
MW-52-42		8.87	
MW-52-52		9.16	
MW-52-62		9.17	
MW-52-72		8.88	
MW-52-82		9.93	
MW-52-92		10.15	
MW-5D		28.38	
MW-5S		26.75	
MW-60-10		4.55	
MW-60-70		4.25	
MW-85B		31.77	
MW-85C		32.14	
MW-9		27.2	
NF-LG-1	651		Elevation sited using MW-121 TOC
OW-103A		7.4	
OW-104A		11.8	
OW-105A	Dry		
OW-E1	620.84		Elevation sited using PZ-118 TOC and PW-47 pad
OW-SW1			Could not read gauge
P-103D		6.6	
P-104B		11.31	
P-104C		6.13	
P-104D		6.92	
P-105B		29.8	
PZ-111A		25.08	
PZ-111B		25.6	
PZ-112A		28.32	
PZ-112B		28.01	
PZ-113A		23.65	
PZ-113B		23.58	
PZ-118		7.05	
WC-27D		26.69	

WC-27S		26.79	
WC-2D		25.28	
WC-2S		25.27	
WC-35D		27.01	
WC-35S		27.05	
WT-1		1.82	

Attachment 4. Boring log of PZ-111 VAS

PARSONS P					LOG OF BORING: PZ_111 VAS			
					(Page 2 of 2)			
Bofors-Nobel Superfund Site 5307 Evanston Avenue Muskegon, Michigan					Drilling Date : 18 October 2010	Geologist : M. Pesci		
					Drilling Company : Mateco Drilling Co.	Screen type/diam. : SS / 2.0"		
					Method : 4 1/4" HSA	Scr. Length/slot : 4.0' / 0.010"		
					Hole Diameter : 8.25"	Depth to Water : 22.0'		
					Weather : Cloudy, 50F	Total Depth : 104.0'		
Depth in Feet	Samples	Recovery %	SPT Blows (per 0.5 foot)	PID (ppm)	DESCRIPTION	USCS	GRAPHIC	Well: Temp. VAS Well Surface Elev.: 650.44
60	31	0	NA	NA		SP		
	32	90	2-5-9-12	2.1	brown, gray SAND, fine, medium dense, with little silt, trace clay, wet			Screen (VAS Interval)
	33	25	5-9-12-14	1.2				Screen (VAS Interval)
	34	75	6-9-12-16	1.1				Screen (VAS Interval)
	35	75	4-7-11-15	1.2				Screen (VAS Interval)
	36	50	4-7-11-15	1.3				Screen (VAS Interval)
	37	75	5-8-11-13	2.4				Screen (VAS Interval)
	38	75	4-8-10-11	2.1				Screen (VAS Interval)
	39	60	6-11-18-22	2.4				Screen (VAS Interval)
	40	75	6-11-16-20	2.4		SP		Screen (VAS Interval)
	41	75	6-8-11-11	2.3				Screen (VAS Interval)
	42	75	3-5-7-9	2.6				Screen (VAS Interval)
	43	60	6-7-7-10	2.3				Screen (VAS Interval)
	44	75	3-6-7-10	2.5				Screen (VAS Interval)
	45	75	7-8-10-12	2.1	- with some silt @ 90.0'			Screen (VAS Interval)
	46	60	6-9-10-13	2.2				Screen (VAS Interval)
	47	60	7-9-11-16	2.7				Screen (VAS Interval)
	48	60	6-8-9-11	3.1				Screen (VAS Interval)
	49	50	6-8-9-11	2.3	gray SAND, fine to medium, medium dense, with some silt, trace fine gravel, wet	SW		Screen (VAS Interval)
	50	50	6-6-9-11	1.0				Screen (VAS Interval)
	51	100	4-4-6-20	3.8	gray SILT, hard, with some fine sand, wet	ML		Screen (VAS Interval)
	52	100	12-29-41-50	3.7	gray CLAY, hard, with trace silt, wet	CL		Screen (VAS Interval)
					End of boring at 104'.			
110								
120								